

FUNDAMENTALS OF INDUSTRIAL MARKETING

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FIRST EDITION

PREFACE

The literature of marketing, like that of its parent study, economics, has been prolific in dealing with the products of agriculture. Within the last decade it has begun to concern itself intensively with goods manufactured for general household consumption. Between agricultural commodities and manufactured articles there is a wide difference in marketing problems and procedure, owing largely to the different degree of control which can be exercised by the producer over the quality and quantity of his product. Very recent indeed is the general recognition that there are fundamental differences between the marketing of goods destined for personal consumption and the marketing of those goods and services which are used in the course of manufacture or trade. Business concerns dealing with these two markets have been forced to recognize the distinction in their tactics and in their organization structures. In the last five or six years a great many articles on specific phases of industrial marketing have appeared in the trade press. So far a comprehensive drawing together of fundamental marketing principles, the experience of concerns engaged in industrial marketing, and current articles on the field has been lacking. This volume represents an attempt to fill this gap in marketing literature.

Its inception came in a suggestion made by W. J. Donald, then Managing Director of the American Management Association. For much of its basic structure a debt is owed to the pioneering work of Professor Melvin T. Copeland in this field. The many studies made by the McGraw-Hill Publishing Company have been extremely helpful. The author's former associates and his acquaintances in the industrial marketing field have helped more than they realize in clarifying his ideas. It is a pleasure to acknowledge here the assistance received from scores of executives who prefer to hide behind the business man's characteristic anonymity. The publications in the Industrial Marketing Series of the American Management Association have proved a most valuable source and have been

drawn upon freely. Professor R. S. Alexander has read portions of the manuscript and made valuable suggestions.

Acknowledgment is also due to the Massachusetts Institute of Technology for affording facilities for collecting material, and to the author's students in his course in Industrial Marketing. Their interest and enthusiasm have been a constant source of inspiration.

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FUNDAMENTALS OF INDUSTRIAL MARKETING

CHAPTER I

WHAT IS INDUSTRIAL MARKETING?

Importance of the Industrial Market.—According to the Census of Distribution taken in 1930, the total value, at the point of production or import, of goods entering into the domestic commerce of the United States in 1929 was \$85,420,000,000. Of this volume of trade, \$32,289,000,000, or 36.7 per cent, represented goods sold to the household market for personal consumption. The balance, \$53,131,000,000, or 63.3 per cent of the total, represents sales of raw or semifinished materials, operating supplies, machinery, and appliances incidental to the production and distribution of goods for consumption. Behind every dollar's worth of goods entering trade channels which lead to the consumer, there is a volume of \$1.64 in trade in the industrial market. This figure, of course, merely represents the volume of exchange transactions and does not form a quantitatively accurate picture of the movement of goods. It may in some instances include the sale of pig iron to a foundry, the subsequent sale of the same iron in the form of castings to a machinery manufacturer, and a third sale of the same material in the form of a completed machine. In other instances, the same transfers of goods may take place, yet not appear in commerce, being merely inter-plant transfers within large integrated organizations. In any event, the marketing of goods not destined for personal consumption in their existing form involves a sufficiently important volume of trade to warrant its study on a broad scale.

Scope of the Industrial Market.—Industrial marketing, in a broad sense, deals with goods which are converted into other forms or which are consumed in the production or distribution of other goods or services. Consumer marketing, on the other

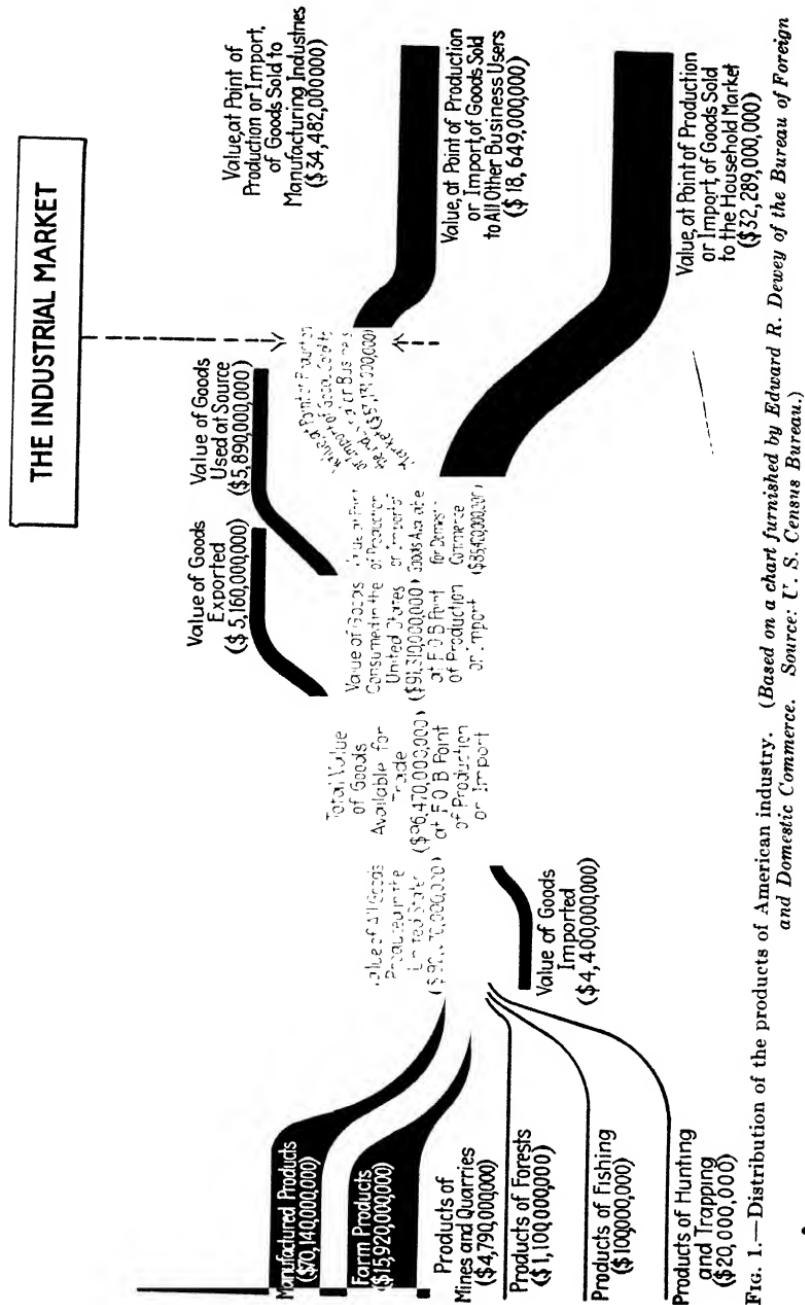


Fig. 1.—Distribution of the products of American industry. (Based on a chart furnished by Edward R. Dewey of the Bureau of Foreign and Domestic Commerce. Source: U. S. Census Bureau.)

hand, deals with goods which in their existing form are used in satisfying the needs and wants of individual consumers. These definitions, it will be noted, correspond closely to the economist's distinction between "producers' goods" and "consumers' goods." For practical purposes, however, certain exceptions must be made. Some goods, though used in production, are purchased in transactions which are essentially retail in nature, and which thus have much more in common with consumer than with industrial marketing methods. Such transactions may be illustrated by the purchase of hand tools by mechanics, or the purchase of a tractor by a farmer. These differ in no essential respect from the typical transactions of consumer marketing and are not separable from statistics covering the latter field. In the other direction, many goods which are intended for consumption are purchased by institutions such as hotels, hospitals, and municipalities, in ways characteristic of industrial purchases. The "institutional market," so-called, is in reality in process of transition. A few years ago it was properly classed as part of the general consumer market; now it seems much more correctly classed as a part of the industrial market.

The industrial market may be considered as including the following types of purchasers:

1. Manufacturing industries.
 - a. Process industries.
 - b. Metalworking industries.
 - c. Textile industries.
 - d. Lumber industries.
 - e. Miscellaneous industries.
2. Mines and quarries.
 - a. Metal and nonmetallic.
 - b. Coal.
 - c. Quarries.
 - d. Petroleum and natural gas.
3. Public utilities.
 - a. Electric light and power companies.
 - b. Gas companies.
 - c. Telephone companies.
 - d. Waterworks.
4. Construction industries.
 - a. Engineers and architects.
 - b. Construction companies.
 - c. Subcontractors.
 - d. Shipyards.

5. Transportation industries.
 - a. Steam railroads.
 - b. Electric railroads.
 - c. Automotive bus and freight lines.
 - d. Steamship lines.
 - e. Air transport lines.
6. Specialized service industries.
 - a. Hotels.
 - b. Restaurants.
 - c. Theatres.
 - d. Laundries, dry cleaners, etc.
7. Institutions, public or private.
 - a. Hospitals.
 - b. Schools.
 - c. Churches.
 - d. Clubs and lodges, etc.
8. Commercial institutions.
 - a. Retail stores.
 - b. Banks.
 - c. Office buildings.
 - d. Warehouses.
9. Government institutions.
 - a. Federal.
 - b. State.
 - c. County.
 - d. Local.

Classification of Industrial Goods.—The goods sold to the industrial market are of great variety but can be classified according to their use, into the following groups:

1. *Major Equipment or Installations.*—This group comprises those items of heavy machinery or equipment which are ordinarily considered as fixed assets of the business (for example, blast furnaces, turbines, automatic lathes).
2. *Accessory Equipment.*—In this group are included smaller items, usually of shorter life, which are supplementary to the operation of the major equipment. Such goods are small tools, jigs, dies, conveyors, interfactory trucks, small motors, time clocks, etc.
3. *Operating Supplies.*—This group includes minor items of very short life which are consumed in operating and maintaining the plant and which are charged against current operations. Typical operating supplies are oils and greases, cotton waste, paper work forms, brooms and mops, cleaning compounds, etc.
4. *Fabricating Parts.*—These are manufactured articles which are used without change as constituents of the finished product.

Representative of such goods are metal stampings, molded plastic parts, bearings, gears, or attachments. Fabricating parts may be standardized unbranded goods, or they may bear the brand of their manufacturer, as with Fisher bodies or Timken bearings.

5. *Fabricating Materials*.—In this group are included manufactured products upon which further manufacturing operations are performed in their incorporation into the final product. Such materials are metal sheets, rods, or tubes, textile fabrics, lumber, etc.

6. *Containers or Packaging Materials*.¹—This class includes boxes, jars, bottles, cans, and various wrapping materials used to protect or adorn the finished product, as cellophane or metal foil.

7. *Process Materials*.—These are manufactured articles which undergo such changes, usually chemical, in the manufacture of the finished product, that their identity is completely lost. Such products are wood pulp, chemicals, plastic molding powders, and pyroxylin.

8. *Primary Materials*.—This group includes those basic raw materials which underlie all production, such as raw cotton, pulp wood, wheat, crude petroleum, wool, and hides. Most of these primary materials have their own specialized marketing methods, usually concerned largely with facilitating the operations of the law of supply and demand.

9. *Services*.—Here are included the various adjuncts to the operation of an enterprise, like electric current, gas, water, steam, telephone service, etc., occasionally furnished by the business itself but more frequently purchased from outside concerns.

This classification is useful mainly as a guide to the marketing methods and buying customs which are found in the different groups, and which are covered more fully in Chap. II.

Characteristics of Industrial Marketing. Inelasticity of Demand.—Industrial marketing in general has certain characteristics which set it apart quite distinctly from the marketing of goods for general consumption. One of the most significant is the factor of inelastic demand. The demand for industrial goods is a derived or secondary demand and depends on the demand for consumer goods. Producers of tire-making machinery, for instance, cannot sell additional equipment to tire manufacturers,

¹ Copeland includes these as "fabricating parts." *Harvard Business Reports*, vol. 9, p. 7, 1930.

regardless of price inducements or sales pressure, if the existing equipment is sufficient to fill the demand for tires (unless the new equipment permits substantial economies in tire manufacture). On the other hand, if the demand for tires should exceed the capacity of the existing machinery, tire manufacturers would place new orders for equipment even if prices were high.

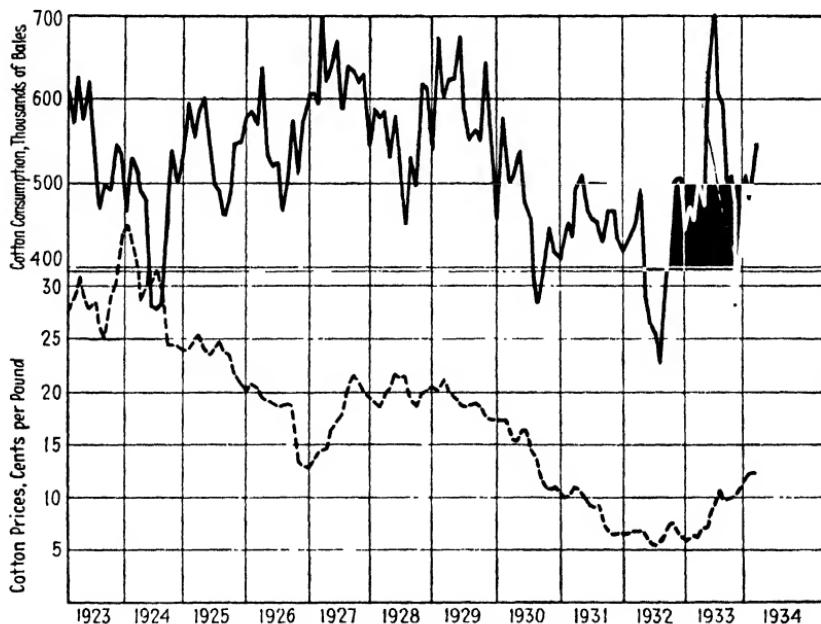


FIG. 2.—Cotton prices and consumption, 1923-1934. " . . . The number of bales of cotton used . . . is not influenced by the price of raw cotton, except in so far as a decline in cotton prices may permit a reduction in fabric prices."

The price series used is the New York wholesale price of middling upland cotton, including some handling and transportation charges. Figures from the Bureau of Labor Statistics, U. S. Department of Labor. The consumption figure represents the number of equivalent 500-pound bales opened monthly in textile mills. (Source: *Survey of Current Business*.)

The number of bales of cotton used in textile mills depends primarily on the extent of the demand for cotton fabrics. It is not influenced by the price of raw cotton, except in so far as a decline in cotton prices may permit a reduction in fabric prices, thus stimulating the primary market. Figure 2 demonstrates this very prettily. When raw cotton prices are at a fairly high level they constitute a fairly large proportion of the total manufacturing cost. A decline in the price of raw cotton can be passed on to make a perceptible reduction in fabric prices. The market for cotton fabrics is not particularly elastic but can be expanded

somewhat by lower prices. Under these conditions we find that a decline in raw cotton prices brings some evidence of increase in consumption. When raw cotton sinks to low levels, however, changes in its cost cannot appreciably affect prices of fabrics to consumers. Thus on the right-hand side of the chart there is no evidence of any relation between prices and consumption of raw cotton.

This comparative inelasticity of demand means that producers of industrial goods cannot as a rule hope to broaden their markets by cutting prices. An individual producer, of course, may be able to take business away from his competitors by price reductions. As a practical matter of fact, however, in a highly competitive market there are fairly definite limits to the progress which can be made in this direction. Competitors, to hold their own volume, are almost inevitably forced to meet the lower price. Since no new volume is secured, the net result is usually merely a lower gross return to everyone in the industry. In some cases, it is true, a lowering of the price level may stimulate substitution of one material or machine or process for another, and thereby broaden the market. Canners, for instance, might be induced to use glass containers instead of metal if technological improvements should permit the cost of glass containers to be reduced to a comparable figure.

The only way in which industrial markets for most commodities can be broadened is to increase the impelling demand from the primary consuming market. To do this through a change in price of raw materials is difficult because of the relatively large proportion of the ultimate consumer's dollar which goes for labor, overhead, and distribution costs. Some producers, alone or through associations, have been able to broaden their markets by sales promotion work directed at ultimate consumers. Thus the Copper and Brass Research Association advertises the superior virtue of plated ware made with a base of copper or bronze. Such methods of expanding markets are not open, however, to a great many producers of industrial goods. (See the discussions of this point in Chap. II, page 20, and in Chap. XII pages 201-204.)

Susceptibility to General Business Conditions.—The secondary nature of the demand for industrial goods is mainly responsible for the extreme susceptibility of most portions of the industrial market to the state of the business cycle. This condition is well

illustrated by the fluctuations in the sales of machine tools in the period 1923-1934 (see Fig. 3). Major equipment is most influenced by cyclical changes in business activity, since a large proportion of this business normally represents sales for expansion. In addition, a lowered volume of production reduces the amount of wear and tear on all machinery and thus operates to

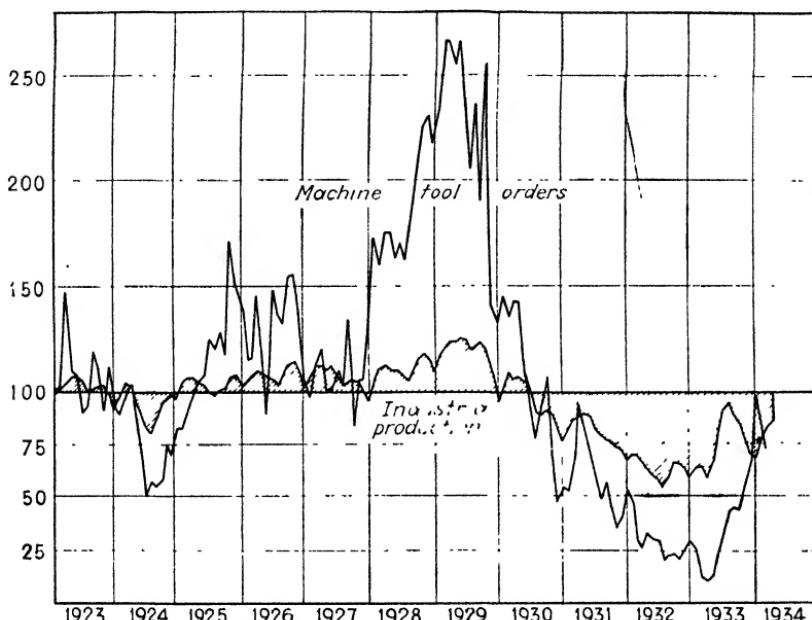


FIG. 3.—Machine-tool orders and general industrial production. " . . . The extreme susceptibility of most portions of the industrial market to the state of the business cycle."

The index-number series for machine-tool orders is that compiled by the National Machine Tool Builders Association, adjusted to the base 1923-1925 = 100. The index represents dollar value of orders received and is made up of reports from 50 to 60 firms, representing about one-third of the industry.

The industrial production series is the combined index (not adjusted for seasonal variation) compiled by the Federal Reserve Board.

defer replacements. Materials used in the manufacture of staple consumer goods are least affected by the business cycle. All industrial markets are indirectly affected by the universal tendency in times of prosperity to expand inventories of materials, parts, and supplies, and in times of depression to defer all but the most urgent repairs and replacements, and to reduce inventories rather than to repurchase. Although the industrial market is as a whole more sensitive to business fluctuations than is the consumer market, the degree of sensitivity varies widely

between the violent swings in machine-tool sales and the comparatively smaller changes in the volume of raw materials sold to the food industry. In this respect, goods handled in the industrial market may well be divided into two classes: "capital goods," and those which enter directly into goods for general consumption. Goods of the first class experience wide fluctuations in volume as general business advances or recedes. In the second group, the major effect of cyclical changes in business is reflected in prices. Certain concerns have found it useful to calculate from their records an index of sensitivity to the business cycle and to use this as a guide in planning future activities.

Rational Buying Motives.—One of the most significant points of difference between industrial and consumer marketing is the dominance of rational buying motives in the former and of emotional motives in the latter field. The primary consideration in any industrial purchase is the profit to be made therefrom. The decision as to whether to buy and what to buy can usually be based on tangible factors expressed in terms of dollars and cents. In many cases definite specifications can be laid down by the purchaser and the product subjected to tests to ascertain whether they have been met. Usually the need to purchase is dictated by the requirements of the buyer's business. The seller's problem thus becomes one of demonstrating in tangible form that the merchandise which he offers will meet the buyer's requirements better or more cheaply than competitive goods. In some cases the need for industrial goods is not conclusively indicated by the internal circumstances of the buyer's business. This is often the case with machine replacements. Here the seller must assume the twofold burden of demonstrating, first, that the need exists, and second, that his particular product will meet the need more adequately than his competitor's. The private consumer typically buys for the satisfaction which he expects to receive. This satisfaction may come from various intangible factors which cannot be quantitatively measured. He is frequently swayed by emotional appeals and seldom has definite standards by which to judge his purchases. To a certain extent emotional appeals still persist in industrial marketing. Personality, family ties, pride of possession, are still and probably always will be potent forces, particularly in the smaller business where the individual proprietor has not yielded to the impersonal, functionalized organization. Nevertheless, the increased emphasis on scientific

purchasing seems to be making rational motives more important in the industrial market; while the increasing margin of income over subsistence requirements seems over the past decade to have emphasized the emotional motives in consumer buying.

Organized Purchasing Function.—The predominance of rational motives in the industrial field is coupled with the fact that usually the purchasing function is definitely organized and manned with trained personnel. This is particularly true in the larger units of industry, which constitute the most important segment of the market. The seller of industrial goods must deal with trained specialists in purchasing, whose positions and advancement depend on their ability to buy efficiently and at least as cheaply as competitors, and who are constantly judged on a dollars-and-cents basis of performance. The industrial purchasing agent may buy goods for his own personal consumption from the same emotional motives as his neighbor, but in buying for his employer's business he has the constant realization that he must be prepared to offer tangible justification for his decisions. This consideration is also likely to influence the other executives in the organization who in many cases participate in making the final decisions as to purchases. Furthermore, even in those cases where the actual power of decision lies elsewhere, the purchasing agent is usually held responsible for securing the most favorable conditions of price and delivery. It must be remembered, however, that there is a wide discrepancy in purchasing efficiency between the large functionalized organization and the small business where the proprietor does the purchasing as a mere adjunct to his other managerial responsibilities.

Small Number of Customers.—The nature of industrial marketing is influenced by the fact that the total number of possible customers is only a fraction of the number of personal consumers. In addition, the individual manufacturer serving this field usually covers only certain segments of the entire market. Industrial markets may be classified as "vertical," in which purchasing is characteristically limited to one industry or a group of related industries; and "horizontal," in which purchasing is confined to a common functional group in a number of unrelated industries. Typical vertical markets exist for many of the primary raw materials, as raw sugar, hides, and cotton. Horizontal markets are represented by the markets for operating supplies, as lubricants, pencils, and paint. The producer serving

a given market will in many cases find the number of his prospective customers further delimited by the fact that his product has no application in businesses below a certain size. This is particularly true of producers of such accessory equipment as time clocks and tabulating machines. Not at all uncommon is the case of a manufacturer doing a business of several millions of dollars, dealing directly with all users of his product who number only a few hundreds.

Large Unit of Purchase.—Though the industrial customer list is likely to be small, the average unit of purchase is commonly considerably larger than in the consumer field. The larger purchasing unit is conducive to more direct relations between producer and user since a broader base exists for absorbing the selling costs involved in direct contact. Consequently the industrial marketer tends to think in terms of the particular customer rather than of the general market. His customer and prospect lists assume much greater importance than do mass statistics. His sales estimates are likely to be built by integration of estimates for individual customers rather than by the application of the law of averages.

Infrequency of Sale.—Although the unit of sale is generally substantial, sales to any individual customer are likely to be relatively infrequent. In the case of machinery and equipment, the purchasing interval is measured by the useful life of the goods. In the case of materials and supplies, although the customer's turnover may be rapid, buying is often done on a contract basis. The seller in the industrial field is likely to find most of his prospects out of the market most of the time. How to keep in sufficiently close touch with them to avoid possible loss of orders and yet not incur needless sales expense is frequently a vexing problem. It is particularly difficult in the case of thin markets for durable goods of low unit value. There comes to mind the case of a maker of special gauges, for instance, who is able to sell to a customer only once in five or ten years. His margin is about \$10. No very close and regular sales contact can be afforded on this basis. Yet unless he keeps in touch with his customers, his competitors may get the repeat orders when they do come along.

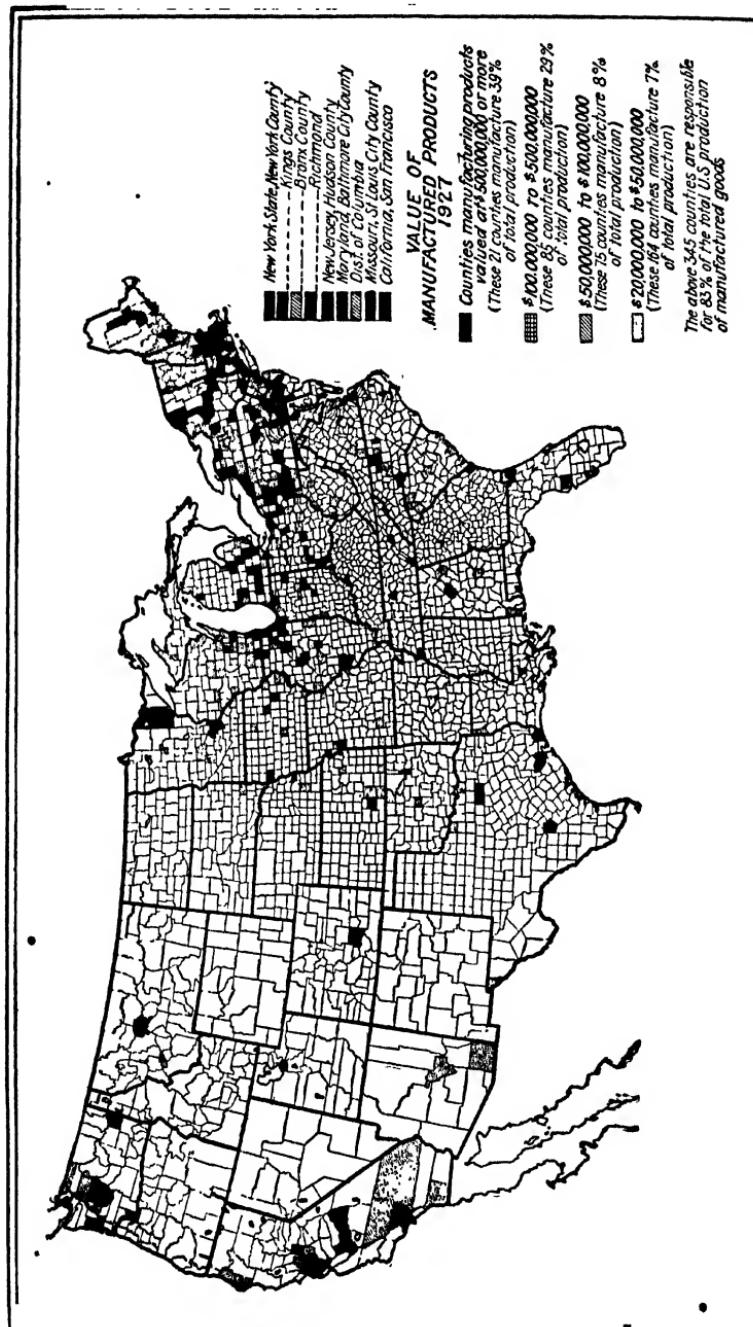
Concentration of Industrial Markets.—Partly offsetting the difficulty of securing timely coverage of markets is the fact that industrial markets are generally concentrated geographically.

Many industries exist only in certain favored localities; consequently manufacturers selling vertically to these industries need cover only small areas. The situation in the oil industry furnishes a typical example. In other cases, although the total number of possible customers may be well scattered, a few large units may control the lion's share of the industry's total buying power and thus permit concentration of sales effort. In manufacturing industries, for instance, although the 1929 Census of Manufactures showed 210,957 establishments producing over \$5,000 worth of goods, 23,158, or 11 per cent of the total number produced 79.6 per cent of the value of all manufactured products. An additional 44,153 units, or 20.8 per cent of the total number, produced an additional 14.2 per cent of the value of all manufacturers. In other words, by covering about 32 per cent of the total number of manufacturing plants it is possible to be in touch with nearly 94 per cent of all the available business in that field (see Table I). Of importance to concerns selling to horizontal buying groups is the further fact that industry in general tends to congregate in certain areas. A study published by the Domestic Marketing Problems Committee of the National Industrial Advertisers Association shows that 21 of the counties of the United States account for 39 per cent of the total value of manufactured products, and an additional 85 counties account for 29 per cent more (see Fig. 4). This tendency toward concentration into large units and small areas facilitates the use of selective selling, which reduces costs through the elimination

TABLE I.—A FEW LARGE UNITS CONTROL THE LION'S SHARE OF INDUSTRY'S TOTAL BUYING POWER¹

Size of establishments (value of 1929 production)	Number	Percent of total	Cumulative per cent	Value of products	Percent of total	Cumulative per cent
\$5,000,000 and over	1,854	0.9	....	\$28,793,897,992	40.8	
\$1,000,000-4,999,999	10,909	5.2	6.1	19,963,218,141	28.4	69.2
500,000- 999,999	10,395	4.9	11.0	7,294,860,945	10.4	79.6
100,000- 499,999	44,153	20.8	31.8	10,023,771,653	14.2	93.8
20,000- 99,999	75,225	35.5	67.3	3,587,697,276	5.1	98.9
5,000- 19,999	69,423	32.7	100.0	771,417,436	1.1	100.0
Total	210,959	100.0	...	\$70,434,863,443	100.0	

¹ Source: Census of Manufactures, 1929.



of areas and groups of customers which are unlikely to yield a satisfactory return. For contrast, consider the consumer market, in which, according to the 1930 census, 44.8 per cent of the entire population lives in small communities and rural areas. The adequate coverage of this part of the market presents a problem of major importance.

Multiple Purchasing Influences.—Orders for industrial goods of more than minor importance are seldom placed on the basis of the independent decision of the purchasing agent. In an analysis of industrial purchases made some years ago by R. O. Eastman for the McGraw-Hill Publishing Company, Inc., it appeared that in only 1 per cent of the transactions studied did a single individual make the purchasing decision. In 9 per cent of the cases, two men were involved, while three or more men had some influence in 90 per cent of the transactions. The range of people having some voice in a purchase may run from the workman at the bench, or the foreman or master mechanic, up to the president and the members of the board of directors. It is quite common to find one man initiating the idea, another approving it, and still others deciding on the type and make of the article to be bought. This means that the seller has a difficult task. To reach the man who places the order is not enough. He must devise some means for reaching every individual who has a voice in initiation, or approval, or selection. It is often exceedingly difficult to determine who are the keymen in an organization; and having determined who they are, it is frequently a hard matter to reach them with an effective sales message.

Negotiations.—Owing largely to this multiplicity of buying influences, the usual industrial marketing transaction involves a rather protracted period of negotiation which varies with the nature and importance of the product. Referring again to the R. O. Eastman study cited above, it appears that the average of 128 transactions showed a negotiation period of 18 days for purchases involving less than \$1,000, and 99 days for those involving over \$1,000. Decisions are reached more rapidly in small plants with simpler organizations, as the time on all transactions in this group averaged 30 days. Medium and large plants, with a higher degree of division of authority, and usually with larger amounts at stake, take more time between the initiation of the idea and the closing of the sale.

Prevalence of Direct Selling.—In view of the importance of the individual transaction to both buyer and seller, it is natural to

find a much stronger tendency to sell direct in the industrial market than is the case with goods destined for consumers. Not only is it economically feasible in most cases for the producer to maintain his own sales contacts, but in many cases there is required a considerable amount of engineering service incident to adapting the product to the customer's needs. Intermediaries seldom function efficiently in this aspect of selling. There does exist a real field for the middleman in industrial marketing, but it is apparently smaller and more restricted than in consumer marketing.

Reciprocity.—Peculiar to industrial marketing is the situation where one concern finds itself potentially both supplier and customer of another. A railroad buys steel and sells transportation services to steel mills. A steel mill sells its product to automobile manufacturers and buys trucks for its plants and passenger cars for its officers and its salesmen. A tanner sells belting to a maker of electric motors and buys motors to supply power for his plant. In such cases there is a natural tendency for the buyer to patronize the vendor who is also his customer. It is also perfectly natural that the salesman for the steel mill should point out to the railroad purchasing agent the fact that his company routes most of its traffic over the road in question. For a producer to buy from his customer—other things being equal—*is* mutually beneficial.

To make a quantitative estimate of the importance of reciprocal purchasing as a factor in industrial marketing is impossible. Many concerns cannot practice reciprocity because they can neither sell to their suppliers nor purchase from their customers to any important extent. Yet the frequency of comment on the problem by purchasing and sales executives furnishes ample evidence that the extent of reciprocal buying and selling is considerable. Railroads very commonly secure traffic by judicious distribution of their purchase orders. Vendors of rail equipment and supplies have not been backward in using their traffic as an inducement to purchase. The practice has been common enough to provoke an investigation by the Interstate Commerce Commission.

While reciprocal dealing is in itself a perfectly defensible practice, its use as a club to force sales is open to question. It is frequently so used. Purchase orders are often divided among customers in the expectation that they will reciprocate by placing

all or part of their business with the buying concern. Patronage is often withdrawn from suppliers who are unable or unwilling to purchase reciprocally. Such practices are often carried so far as to interfere seriously with legitimate marketing activities. A group of individuals connected with a large shipper organized a company to manufacture an item of railroad equipment. Railroads were urged to buy this article, at a fancy price, with the alternative of losing the shipper's traffic.

Much attention has been paid to the handicaps which reciprocal dealing places on efficient purchasing. It may lead to the payment of unreasonably high prices, to the sacrifice of quality or delivery service. It may result in uneconomic dispersion of purchase orders. On these grounds purchasing officials usually condemn the policy which requires them to buy only from customers. Sales executives usually like the practice to the extent that it aids them in securing business which would otherwise be unavailable. They curse it fervently when competitors' reciprocal arrangements close markets to their salesmen. In fact, the overstressing of reciprocity has serious marketing disadvantages. It restricts markets. It may increase the difficulty of winning customers for an improved product and thus to some extent tends to discourage development work. It intensifies the small-order problem, since buyers are led to split their business among as many suppliers as possible in order to secure compensatory sales from a maximum number of customers. It places the small concern, with little in the way of orders to trade, at a competitive disadvantage. More serious, perhaps, is the effect on the morale of the sales organization. A report made by a special committee of the National Association of Purchasing Agents declares that "reciprocity is the plea of a weak salesman or the hammer of a strong buyer." Concerns which follow the policy of seeking sales by trading purchase orders are likely to neglect the proper presentation of the really significant selling points of their products. Such neglect inevitably tends to deterioration of the marketing organization.

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CHAPTER II

HOW INDUSTRIAL GOODS ARE BOUGHT AND SOLD

Three steps are commonly involved in an industrial purchase: (1) the decision to buy an article for a certain purpose; (2) the specification of the type of article to be bought; and (3) the decision as to the source of supply. The first and second steps are influenced primarily by what have been termed "buying motives," defined as the motives which lead a customer to buy a particular article or type of article. The third step is influenced by "patronage motives," which are the motives which induce a customer to trade with a particular firm.

Buying Motives.—Industrial buying motives are essentially rational. The motivating force behind most purchases is the desire to make a profit as a result of the transaction. Emotional motives also play a part, however. A business man may buy the latest type of conveyor system or office appliance because he desires his concern to be regarded as thoroughly up-to-date, rather than because of any actual need for the equipment. This motive of personal pride naturally plays a more important part with proprietors of their own small or medium-sized concerns, although directors of large corporations are not always immune. Even in large organizations noted for their efficiency and hard-headed management there is occasionally evidence that collective pride has outweighed rational considerations in making buying decisions.

Cost Reduction (Direct).—Probably the strongest industrial buying motive is the desire to produce goods at lower cost. The strength of this motive is attested by the number of current advertisements and sales presentations which stress savings of time of either executives or wage earners; reduction in quantity or cost of materials required; savings in fuel, power, or supplies; or reduction in spoilage. Claims of this nature made by sellers are usually closely scrutinized by prospective customers, and there is an increasing tendency toward the supplying by vendors of authentic factual data to back up their claims. Detailed

performance reports of machinery installations, exact analyses of materials and supply items, attested cost sheets under actual operating conditions, and similar items of evidence are being used with considerable success by many progressive sellers of industrial goods.

. *Cost Reduction (Overhead).*—Buyers are also influenced by the desire to reduce the fixed and semifixed charges on their businesses. Durability, permitting a longer period between replacements and hence a lower depreciation charge, is an important factor, particularly where the obsolescence rate is low. Dependability, insuring lower maintenance charges or less interruption of production for repairs, also motivates many purchases. In good times the argument of uninterrupted production probably carries more weight; when sales are poor the arguments of lower maintenance cost or reduced spoilage assume greater importance. The ability to produce a more uniform product or one of higher quality is likely to prove a strong influence with producers of branded articles who have invested heavily in advertising to create consumer good will. Other related phases of this general buying motive are ease of installation or repair and facility of control.

Flexibility.—Closely related to the desire to reduce overhead costs is the tendency to seek versatility in equipment, supplies, and sometimes even in materials. In the rapid expansion of volume of standardized goods which took place in the years immediately following the World War the trend was toward highly specialized single-purpose machinery and toward parts adapted for only one use. The accelerated rate of change in demand has increased the importance of the problem of obsolescence, both style and technical. The greater the rapidity of change in consumer requirements, the smaller will be the volume of each model or type of product, and the greater will be the appeal of industrial goods which retain at least a portion of their value through these periods of change. The value of flexibility as a buying motive is evidenced by the movement in machine design toward standard beds with interchangeable heads.

Protection.—Many industrial purchases are due to the desire to avoid loss through events difficult to control. The purchase of stock-room equipment to prevent petty pilferage is a case in point. So is the purchase of a sprinkler system to minimize the fire hazard. In such cases as the latter the economy motive is

frequently combined with the desire for protection. Fire-protection equipment, for example, is commonly sold on the basis of a reduction in insurance costs sufficient to pay for the equipment over a period of years. The desire to insure the perpetuation of a business may express itself in the purchase of a fireproof safe to protect vital records. Desire for protection against legal liability influences many purchases of safety devices, as shields for machinery and goggles for employees' eyes.

Increased Productivity.—Increased productivity of plant has proved a particularly important buying motive in times of expanding business. Ability to increase the number of units produced without the need of incurring a proportionate increase in overhead cost, or avoidance of construction delays, appeals very strongly to the executive who is finding a ready market for his product. This motive also powerfully influences the man who can visualize increased sales but who is faced with limitations of space or of capital for duplication of his present facilities. Although potent in times of good business, this buying motive is obviously not influential in times of depression when existing capacity outruns demand.

Improved Salability.—Particularly in periods when sales are sluggish and chief executives are in the mood to make changes, the desire to improve the salability of the product constitutes a highly important buying motive. It is the dominant motive, as a rule, in the purchase of packaging materials. It often plays a very important part in the purchase of fabricating parts and materials. Capitalizing this motive, many vendors of materials and parts which are identifiable in the finished product have advertised their goods to the consuming public. Thus the automobile manufacturer presumably enhances the salability of his car when he uses parts or accessories which have attained wide recognition. The same motive may apply to items of machinery, accessory equipment, or raw materials which permit the manufacture of a product of improved quality. This buying motive is constantly becoming more important, a tendency which will probably continue as more emphasis is laid on the policy of coordinating production with consumer demand.

Patronage Motives.—Although the motives which influence the choice between possible suppliers are largely rational, emotional motives unquestionably play a more important part than in the decision of whether or not to buy. When a number of

vendors are competing on fairly even terms the final decision is quite likely to rest on the personalities of the salesmen involved. Personal friendships or family ties can never be disregarded. They influence the placing of countless orders and sometimes offset rather substantial differences in price or services. The influence of long-continued business relations is often a determining factor in the placing of an order, although for the past few years there has been an increasing tendency to break down the old established loyalties between buyer and seller.

Low Price.—Unquestionably the most powerful single patronage motive is low price. The chief responsibility of the purchasing agent is to make sure that his employer suffers no disadvantage by paying higher prices than do his competitors. Inasmuch as the quality of industrial goods is usually measurable in tangible fashion, a large number of transactions hinge entirely on price as the common denominator to which all proposals can be reduced. Yet perhaps too great attention is given to the quoted price and too little to what is really the vital factor, the cost of the goods purchased in terms of the profit derived from their use. No doubt this is partly due to shortsightedness on the part of many buyers; but it is also in large measure due to the lack of skill on the part of most sellers in demonstrating in some tangible way the values in their goods which offset higher quoted prices.

Reliability.—Another very important motive for patronage is the buyer's belief in the seller's reliability. This may take various forms. Certain concerns will place orders only with firms of unquestioned financial position in order to be sure that contracts will be fulfilled or that continuity of supply will be assured. Sometimes a reputation for uniform quality will influence a buyer to place his orders with a certain source of supply even though lower prices may be obtainable elsewhere. A record for punctuality in delivery may also have a great deal of influence on the decision between prospective suppliers. This factor is of great importance in those industries which habitually maintain low inventories, as in automobile manufacturing. Here the failure of a carload of materials to arrive on time may seriously disrupt production schedules.

Service.—Services rendered by seller to buyer constitute an increasingly important factor in the choice of a source of supply. These services may take a variety of forms. The maintenance

of an exceptionally complete stock or the ability to make rapid deliveries will often win orders in the face of keen competition. Services of this sort are particularly important in the case of standardized goods which are manufactured to stock. They constitute important patronage motives under all business conditions. In busy times they facilitate rapid production, and in dull times they permit buyers to carry lower inventories, thus reducing expense.

Another important phase of this subject is the engineering service supplied by many organizations to their present and prospective customers. Frequently technical experts make surveys of establishments and work out specifications for installations of major or accessory equipment. A large paint manufacturer maintains a "paint prescription service" which studies building interiors and prepares in each case a painting schedule which recommends the kind and quality of paint and the frequency of application for each surface requiring protection. Similarly, a manufacturer of rubber products furnishes expert service to prospective customers in studying the use of belting for power transmission or conveying machinery. Machine-tool manufacturers frequently make analyses of buyers' or prospects' production problems. Many industrial marketing organizations also furnish service to insure that the purchaser gets proper results from the things he has bought. Makers of all kinds of goods maintain forces of "trouble men" who straighten out customers' difficulties, sometimes regardless of the cause. Prompt and efficient repair service often furnishes another strong patronage motive.

Variance in Buying Motives.—In selling industrial goods it is important to study the motives which are likely to influence the customer's decision as to whether to buy and where to buy, and to endeavor to appeal to the motives which carry most weight. It must be recognized that general business conditions and competitive conditions in the prospective buyer's industry may cause variations in the importance of the different motives from time to time. It must also be kept in mind that many purchases require the approval of more than one individual and that in these cases each participant in the decision may be influenced by different motives. In selling a piece of machinery, for instance, the superintendent of the shop in which it is to be used may be interested in increased productivity, the master mechanic in

simplicity of maintenance, the comptroller in its effect on costs. A coordinated series of specialized appeals must be brought to bear on such a sales problem.

How Buying Is Done. Major Equipment.—The purchase of major equipment involves an expenditure of capital. A new installation is made either as part of an expansion program or to replace an installation which has become obsolescent. In either case the decision to buy is based on conditions in the industry in which the customer operates. The question of purchasing major equipment involves decisions as to the kind and quantity of product to be made and usually requires planning for a period of several years. Such decisions are the function of the major executives of a business. They may be termed a "vertical" buying group since they are usually concerned with the coordination of all the functions of a business into a unit within its industry rather than with the details of the functions.

In the purchase of installations there are three major steps. It must first be decided that a need exists which warrants making the necessary capital expenditure. The need is quite likely to be suggested by the head of one of the operating departments, but the decision, unless the amount is small, rests, as stated above, with the heads of the business. Then the type of installation must be determined. For instance, assuming that it has been decided to install equipment for handling materials, it must be decided whether to use a crane, an overhead system, a conveyor system, or trucks. This is more of a technical production problem and is likely to be settled by the man in charge of production, or the chief engineer, or both. Last comes the decision as to the make to be bought. Since major equipment items are almost never entirely standardized, the choice of make involves technical comparison as well as comparison of price. Consequently it is common to find the engineer or production manager making the technical decision and the purchasing agent considering the question of value. In some companies the operating officials and engineers are asked to consider the various makes and submit to the purchasing agent a list of perhaps three satisfactory suppliers, permitting him to make the final choice within the list on the basis of price.

A survey made by R. O. Eastman, Inc., some years ago for the McGraw-Hill Publishing Company, Inc., traced each of 324 sales of equipment and supplies back to the point of inception. It

was found that in 21 per cent of the cases the purchase was suggested by the head of the department using the equipment. However, the department head made the final decision to buy in only 2 per cent of the cases. In the other cases the decision was made higher in the organization. (The fact that accessory equipment and supplies were also considered in the investigation tends to bring the responsibility for decision lower in the organization than would be the case if major items of plant equipment alone had been considered.)

The time of purchase was decided by the general superintendent in 25 per cent of the cases, by the president of the company in 24 per cent, and by the department head in only 3 per cent. Time of purchase again is likely to involve decisions as to company policy.

The type of equipment was decided in 38 per cent of the cases by the general superintendent and in 26 per cent by the chief engineer. Regardless of where the final authority lies, both play an important part in this decision. The decision as to type was finally made by the president or general manager in 12 per cent of the cases. This indicates that the general administration plays some part in the choice of type, particularly when large amounts of money are involved.

In every case the general superintendent considered the question of make. In 37 per cent of the cases he made the final decision, and in 39 per cent, although the actual decision lay elsewhere, his approval was required. The purchasing agent made the final decision in 25 per cent of the cases and in 27 per cent his approval was necessary.

The fact that, in equipment purchasing, the decision as to type frequently carries with it a decision as to the make accounts for the circumstance that in 39 per cent of the cases only one make was given serious consideration. In 16 per cent of the cases two makes were considered; in 19 per cent, three; in 10 per cent, four; and in 8 per cent, five.

The difficult process of selling equipment is indicated by the fact that in 90 per cent of the cases studied more than two individuals had a decisive voice in the transaction. Generally speaking, there are three functional groups which must be reached by the seller, each group being influenced by different motives. The operating group usually suggests the need and is interested primarily in how the equipment will solve operating problems.

The managerial group makes the final decision as to whether the purchase shall be made, and is usually influenced by the desire for increased production or improved quality of product. This decision is usually subject to the approval of the financial group, which is interested primarily in increasing profits, either through larger earnings or lower costs. Then there is the decision as to type, involving manufacturing executives and engineers; and finally the decision as to make, usually determined by operating officials and the purchasing agent. Another study of equipment purchasing¹ carried on over a year's time and based on 718 interviews yields roughly similar results. Its conclusions are presented in Fig. 5.

The influence of financial executives in major equipment purchases is considerable. In the survey of equipment purchasing policies conducted by the Committee on Recent Economic Changes in 1928, out of 88 companies replying, 39 indicated that they had definitely fixed the time in which new equipment must pay for itself out of savings. The most common period named was between two and five years. One company had a standing offer to buy any machine or process which would pay for itself in two years. Some automobile plants require that new equipment make a saving of 40 per cent of its cost the first year. These facts indicate that the seller must be prepared to demonstrate the financial results of purchasing his equipment. One company is reported to have met this situation by sending out both a sales engineer and a financial expert to prospective customers. The former discusses technical and operating points with production and engineering officials; the latter takes up with the treasurer or possibly the board of directors the economic and financial factors involved in the purchase.

In the selection of the type of equipment, and in some cases the make, architects and consulting engineers frequently play an important part. Very large companies are likely to depend in considerable measure on their own engineering staffs, but companies of medium size frequently employ professional advice in planning additions or replacements. Small companies may utilize the professional skill of the larger units in indirect fashion by purchasing the same type and make of equipment as the large well-managed units in the same industry. The promotional

¹ *Who Are the Real Buyers of Shop Equipment?* Research Department, Machinery, 1931.

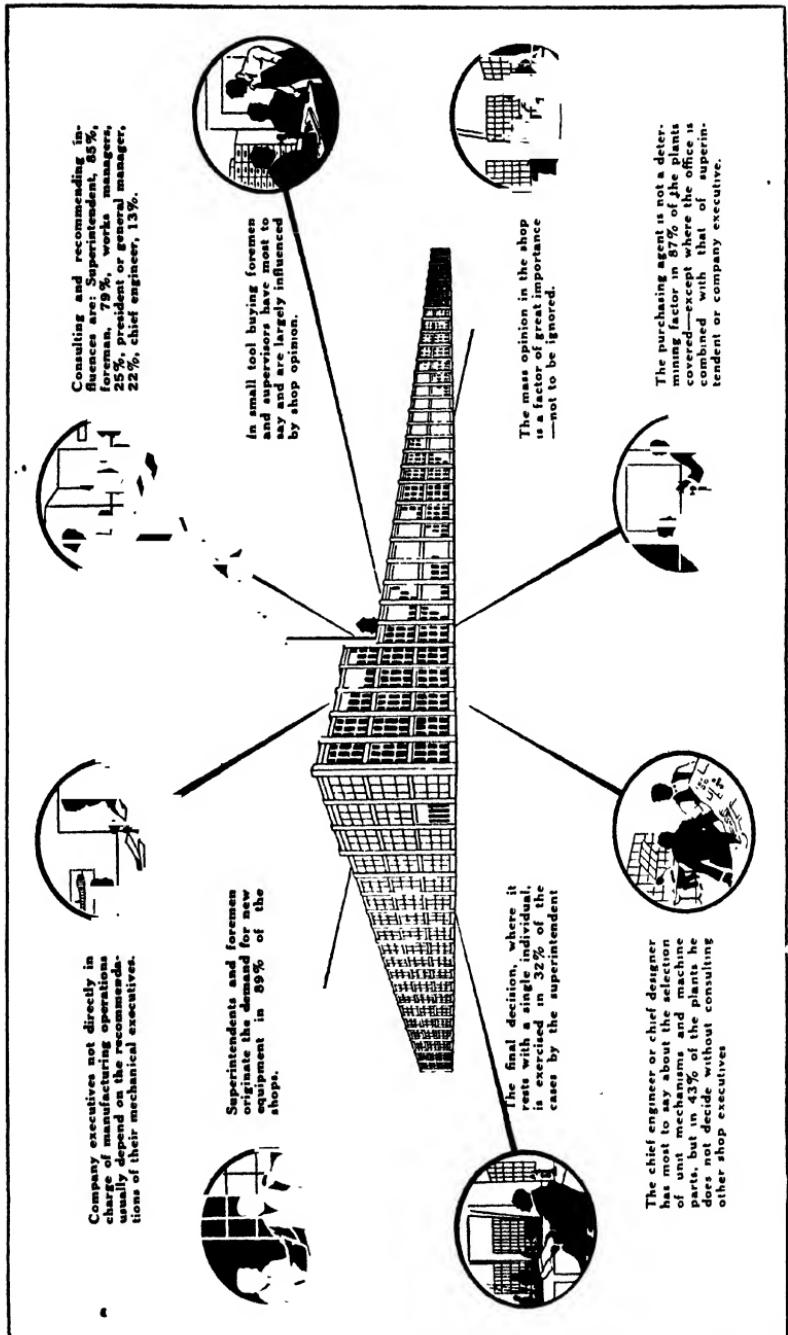


FIG. 5.—Chart taken from special report entitled *Who Are the Real Buyers of Shop Equipment?* issued by the publishers of *Machinery*. Used by permission.

value of sales to certain plants is therefore in many cases quite considerable. Sales of this sort are likely to influence not only executives of smaller concerns but also the professional consulting groups.

Accessory Equipment.—Items of accessory equipment are usually purchased merely to facilitate efficient operation. Their purchase seldom involves any considerations of major company policy. Their life is usually shorter than the life of major equipment. Frequently they are not carried in the capital accounts, or, if they are, they do not constitute important items, and they are usually charged off rapidly. Decisions to purchase accessory equipment are commonly made by department heads, with their immediate subordinates possibly having some influence in the selection of type or make. In companies too small for departmental organization, the chief executive, of course, determines such purchases. However, by their very nature, many items of accessory equipment find use only in organizations beyond a certain size. This is particularly true of those items of equipment designed to facilitate executive control. Accessory equipment is usually sold in many diverse industries or to all industries, and the men making the buying decisions are usually primarily concerned with functions rather than with particular industries. They thus constitute a "horizontal" buying group. The purchase of typewriters or other office machinery is usually controlled by office managers, who are essentially functional executives and who can, and frequently do, migrate from one industry to another.

An influence which is often neglected in the sale of accessory equipment is the attitude of the employees who use it. Such goods are often subjected to tests under actual operating conditions prior to adoption. Their success in such tests depends not only upon their intrinsic quality, but also upon the skill and efficiency with which they are used. A single minor employee, clerk, stenographer, or mechanic, may make a piece of equipment seem good or bad according to his whim or prejudice. The importance of this consideration is illustrated by the experience of a company making several lines of mechanical equipment which brought out a locomotive feed-water heater. In trying to arrange the adoption of the heater by a certain railroad a test installation on one locomotive was made. Various difficulties developed with the mechanism, and the tests proved decidedly

unsatisfactory. Upon careful investigation it finally came out that the firemen feared that the new heater was a step toward the loss of their jobs and they made sure that it should be continually getting out of order. When the true problem was recognized, it was possible by directing sufficient sales attention to the firemen to convince them that the equipment meant no loss of jobs or of pay, but that it made their work much easier. This done, satisfactory performance was immediately attained.

Operating Supplies.—Operating supplies are generally purchased in more or less routine fashion. Their turnover is rapid, and purchases are made at frequent intervals. At the time of the initial purchase, several makes and sources of supply may be investigated. Subsequent purchases usually involve mere replacement from the same source. Occasionally dissatisfaction with quality, delivery, or price will lead to a reconsideration of the purchasing problem. Sometimes sales pressure from a particular vendor may lead to a reopening of the question. Individual purchases of operating supplies are in most cases relatively small, and the importance of a single concern's business is seldom great enough, either to buyer or seller, to warrant extended negotiations.

Operating supplies are usually bought by the purchasing agent in the first instance, with subsequent reorders, as stated above, handled as departmental routine. Sometimes the range of discretion of the purchasing agent is limited by specifications drawn up by operating executives. In many cases of non-standard articles of small value the purchasing agent is guided by the recommendation as to source made in the user's requisition. Price is generally a major factor where any considerable volume of business is concerned. Operating supplies are sometimes purchased on the basis of competitive bidding, but this method is of real importance only in the case of institutions and governmental organizations. Purchasing on contract is not infrequent. In these cases the contract almost invariably contains a price-protection clause which entitles the buyer to the contract price or the market price, whichever is lower.

The market for this class of goods is a typical horizontal market. It is extremely competitive, since the goods are usually fairly well standardized, and as a rule it is difficult to establish patronage motives other than price. Certain manufacturers of lubricants, however, seem to have had considerable success in introducing the service element, making studies of

prospective customers' lubrication problems and recommending the proper material for each use. The DuPont Paint Prescription Service is another outstanding example of this practice. Such a sales approach is obviously feasible only where the volume of a supply item aggregates a considerable amount.

While in the large or medium-size business the purchase of operating supplies is almost invariably handled by a central purchasing department, it is evident that as the business becomes smaller the actual user plays a more important part. For instance, surveys made by a large manufacturer of office equipment indicated that in the small office the stenographer has practically the final word as to the kind of typewriter ribbon and carbon paper which is bought. Recognizing this fact, a line of typewriter ribbons was put out in artistic boxes resembling powder compacts. This innovation resulted in a decided increase in sales, particularly in the smaller units.

Fabricating Parts.—In the case of fabricating parts the decision as to what type shall be used generally rests with the man in charge of product design. There is frequently involved a decision as to whether the part in question shall be made in the user's own plant, designed by the user and made on contract, or bought from some outside manufacturer who both designs and manufactures. This decision may involve fundamental questions of policy or of capital investment; hence it is made by the major executive group. The choice of the source of supply may be made by the officials in charge of design or operation, especially where the part is of a specialized nature. If it is a standardized product the purchasing agent commonly makes the decision as to source. In some cases the sales department is an important influence in the purchase of parts. This is particularly true in cases where parts manufacturers have built up considerable good will among ultimate consumers, so that the fact that a well-known and widely advertised part is embodied in the product affords a sales advantage. Furthermore, the sales department often possesses a considerable power of veto over changes in fabricating parts, particularly when they result in obvious changes in the final product. Quite frequently the maker of a new type of part must undertake to win consumer acceptance for it before manufacturers' sales departments will sanction its general adoption. This may involve an extended period of market tests.

The market for fabricating parts is primarily vertical in nature, being concerned with a single industry rather than with any specific function. In a few cases, however, we may find elements characteristic of a horizontal market, where the primary appeal is made to men in terms of their functional interests. Such might be the case with steel stampings, for instance, where the appeal may be to men interested in reducing the weight of their products, regardless of the industry with which they are connected.

Fabricating parts are usually purchased in large quantities although deliveries may be spread over a considerable period. Frequently long-term contracts covering six months or a year are made to insure a continuous supply of uniform parts. These contracts may be negotiated by the purchasing official but are almost invariably subject to the approval of the general executives of both buying and selling companies.

Fabricating Materials.—Fabricating materials are specified as to quality by the officials in charge of design or production, the latter practically always having considerable advisory influence. Sometimes the sales department participates in the decision but its role is less important than in the case of fabricating parts. Subject to these specifications the purchasing official usually controls the buying. Price and reputation for reliability are likely to be the major patronage motives. Since a steady flow of uniform materials is vital, they are frequently purchased on contract. Such contracts are sometimes for definite quantities but more usually they call for deliveries as required up to a stated maximum. They usually contain a price-protection clause. Contracts of this sort are often negotiated by the purchasing agent on his own responsibility when his position is an important one in the organization. Otherwise the approval of one or more higher officials may be required. There seems to be a tendency for contracts for parts and materials to be negotiated directly between major officials of vendor and purchaser.

Since fabricating materials are subject to exact specifications which can usually be met by a number of suppliers, price competition is rather intense. Alterations in physical form during the manufacturing process make difficult the identification of the material in the finished product; thus the producer finds it difficult to build up a degree of consumer acceptance which will make the customer's sales department his ally in securing the

adoption of his goods. Several noteworthy attempts along this line have been made, however. A manufacturer of lining materials furnishes labels which are sewn into garments made by his customers to identify the material used and thus create in the ultimate buyer's mind a recognition of quality. Several similar attempts appear to indicate a considerable tendency in this direction which may eventually have a stabilizing influence on the markets for certain fabricating materials.

Packaging Materials.—The increasing recognition of the merchandising function by manufacturers and the tendency in retailing to use open display to promote "impulse buying" on the part of individual consumers have led to an emphasis on dressing up the product. The purchase of containers and packaging materials, once a routine matter based largely on price, is now based on the desire to enhance the salability of the product. Such items are most frequently specified by the merchandising department, if one exists, or by the sales department or the advertising agency. The latter plays a very important part at the present time. This change is directly related to the increased influence of the marketing end of the business in specifying fabricating parts and materials. Since as a rule these items are highly specialized, the selection of the material often carries with it the decision as to the source of supply. Service rendered by the seller in the creation of new types and designs of packages is probably the outstanding patronage motive.

Process Materials.—Process materials are as a rule highly standardized and subject to rigid specifications, usually set by the operating staff, subject to policies as to quality laid down by the major executives. Standard specifications are commonly used and prices of various standard grades quoted on the open market. The purchasing agent ordinarily determines the source of supply. In some cases it is possible to use two or more grades or forms of the materials, and the purchasing official may be permitted to change the grade or form purchased if the price differential justifies. There is no opportunity for identification of process materials in the finished product, hence price, uniform quality, delivery service, or technical advice furnish the major bases of competition. Attempts have been made to secure the sales advantage of ultimate consumer good will. For example, Procter & Gamble encourages laundries to advertise their use of Ivory soap as an aid in securing business, and General Mills

stimulates bakers to announce their use of Gold Medal flour. No tangible evidence as to the effectiveness of such measures is available.

Prices of process materials are usually standardized and printed quotations are often available in the business and trade press. Price-protection contracts are commonly used, and frequently the contract price is somewhat lower than the spot, or open-market, price. Contracts usually are for requirements, with a stated maximum, rather than for definite quantities. As a rule the majority of contracts for an industry are written at about the same period. Frequently they coincide with the calendar year. Consequently the large users of process materials are in the market only once a year, and such contracts as a seller wins must be secured within a limited period.

In times of general business activity the quoted prices of process materials are fairly rigidly maintained. In times of low activity, however, producers of such materials frequently shade their prices to such an extent that published quotations are purely nominal. It is usually necessary for a producer to meet the prevailing market price, whatever it may be, and to use other patronage motives to secure new business and hold his old customers.

Primary Materials.—Each of the various raw materials has its own specialized market, the characteristics of which reflect conditions of supply as well as demand. Raw-material markets are vertical, each forming the basis for a single industry or a group of related industries. Purchases are usually made by men with expert knowledge of the particular materials they buy. In some industries the buying of these items is the chief responsibility of the purchasing agent, in others a special buyer may handle them. Usually the raw-material buyer is one of the chief executives of a business. Primary materials are bought in large amounts. They usually constitute a high percentage of the ultimate cost of the finished product. Prices for them fluctuate considerably, and in purchasing them much attention must be given to present and future market conditions. Frequently a highly specialized knowledge of grades and sources of supply is required. In those industries with a relatively small spread between production cost and sales price it is therefore natural to find major executives in control of raw-material buying. In industries where a relatively high gross margin exists, purchases

of materials may be controlled lower in the organization. In shoe-manufacturing concerns the leather buyer is a very important individual. Many cotton-mill treasurers themselves undertake the buying of raw cotton. On the other hand, with manufacturers of tooth pastes or face powders, material purchasing may be a routine task of the purchasing agent. Some concerns employ brokers skilled in particular markets to purchase their primary materials. This is particularly true of small organizations which cannot afford to maintain on the payroll men with the requisite expert knowledge.

As a rule there is little opportunity for active selling of raw materials. Producers are frequently small and scattered, and as they are selling the products of nature there is little chance for any but a specially favored producer to do more than offer his product for sale in the organized market at the prevailing price.

Services.—In the case of some services, such as telephone communication, there is little question as to whether to purchase, but there is a real marketing problem for the companies furnishing such services in securing their maximum use. Decisions as to the installation of additional facilities are usually made by department heads, with actual orders generally coming through the central purchasing department. The matter of increased use of existing facilities is in most instances in the hands of individual minor executives. A concomitant of periods of reduced gross income may be the issuing of orders by major executives curtailing facilities or requiring strict economy in their use. In normal circumstances such expenses as bills for telephone, light, heat, power, water, etc., are subject to little control by the central administration of a business.

In the case of certain services, electric power as an example, the question may arise, especially with concerns beyond a certain size, as to whether the service should be bought or furnished by the concern using it. Many companies require large amounts of steam for heating or for process use. The question naturally arises as to whether they should install steam turbines, generate their own power, and still have the exhaust steam for heating purposes. This involves matters of capital assets and general policy and is finally decided by the central administration. The securing of such business by utility companies usually involves a period of negotiation as to rates. The actual handling of the negotiations in many cases rests with the

purchasing official. Power, steam, gas, or water is usually furnished to industrial users on a contract basis, the contract as a rule being signed by high officials of both companies.

Professional Services.—Still another class of industrial commodities may be considered to exist if we include such professional services as are furnished by advertising agencies, accountants and auditors, consulting engineers, financial and business services, research organizations, etc. These services may have either horizontal or vertical markets. According to their nature and their cost they may be purchased either by chief executives or by functional executives. As a rule the purchasing department plays no part in such transactions unless possibly the purely routine role of approving bills for payment.

The Purchasing Agent.—While the actual decision as to need, type, or even make of goods to be bought may often be made elsewhere in the organization, the purchasing agent remains an important factor in almost every transaction. He is the natural point of contact for vendors approaching his concern. Frequently it is only through him that the actual keymen in a transaction can be identified and approached. An occasional cause of vexation to industrial sellers is the purchasing official who insists upon being the sole point of contact, although the real power of decision may lie elsewhere. This difficulty is more likely to arise in the medium-sized company where the purchasing function comes rather low in the organization structure. It is as a rule decidedly impolitic to go over the head of the purchasing agent. Certainly it is inadvisable that the first contact be made in such a way. In some cases, to avoid stalemate, it may be necessary to go higher against the purchasing official's wishes. This is a dangerous procedure and not conducive to continued friendly relations. By and large, however, industrial purchasing agents, especially in the more successful and well-managed companies, willingly open the doors of contact with keymen to dependable vendors.

In the case of the small industry, or the loosely knit business or social organization, there may exist no organized purchasing function. It is usually vested, along with most of the other managerial functions, in one man who, unless he is the sole proprietor, may be difficult to identify as the really influential person. The press of his manifold duties may make it difficult to get an adequate hearing once he is located. The small business

man often lacks imagination and tends to take a conservative attitude toward innovations. Financial resources are often lacking to make a purchase even when its need is clearly apparent. Such concerns, though they constitute a majority of possible industrial customers, usually account for not more than 15 to 25 per cent of the potential volume of orders in a given field. Consequently there is a tendency on the part of many producers to concentrate their sales efforts on the plants and organizations large enough to have functionalized their purchasing.

Business Conditions and Purchasing Authority.—Many events in recent years make it safe to generalize that in times of general prosperity and expanding business the real responsibility in deciding on purchases is largely delegated to department heads or subexecutives. In times of little business activity and low profits or none at all, the president, general manager, or chairman of the board may undertake to decide on even relatively small purchases. This is a fact of great importance to concerns serving the industrial market although few seem to realize all its implications. Changes in the level of business activity may require radical revisions in mailing lists and in the lists of people salesmen are required to contact. Expanding business results in delegation of authority. A subordinate newly vested with the power to decide is likely to feel resentment against sellers who continue to approach his superior and ignore his new authority, and conversely to appreciate recognition of his new dignity. In a period of depression, contraction of customers' organizations makes prospect lists largely invalid as keymen are eliminated or their powers assumed by higher executives.

Influence of Purchasing Policies.--Various purchasing policies of the customer may have considerable influence on the choice of suppliers, or on the amount of business available for any given vendor. Frequently, in order to insure against any possible interruption in the flow of materials or parts, buyers will adopt a policy of splitting their requirements between two or more vendors. Thus in the event of fire, flood, strike, or other disturbance in one plant, another source of supply is assured. When a buyer follows this policy, obviously only a part of his business can be secured by a single vendor and there is little use in trying to secure more.

Some manufacturing concerns, many institutions, and most governmental organizations purchase on the basis of competitive

bidding. Calls for bids are usually publicly made, either by advertising in newspapers or trade journals or by circularizing lists of possible suppliers. Detailed specifications are prepared and made available to prospective bidders. It is usually provided that sealed bids be submitted at a specified time and place and it is sometimes required that each bid be accompanied by a certified check as a guarantee of good faith. Representatives of bidders are often permitted to be present when bids are opened. It is customary to award the order or contract to the lowest bidder who can demonstrate his financial responsibility. The right to reject all bids and call for new ones is commonly reserved.

Competitive bidding is probably highly desirable in governmental purchasing as a check on graft and favoritism in awarding orders, although there is evidence that even under such a system there is ample room for manipulation. For private business the system seems to have fewer advantages. It reduces competition entirely to a price basis and discounts the other patronage motives which count heavily in industrial buying.

When competitive bidding is used, the only recourse of the prospective vendor aside from cutting his price (unless he resorts to bribery or to combination with other suppliers) is to endeavor to influence the writing of the specifications. This may be done honestly or dishonestly. A maker of a high-quality article may legitimately convince the specifying authority that ultimate economies will be effected by raising the standards. In many instances, however, various devices are used to get into the specifications joker clauses which practically insure that a certain concern will be the successful bidder.

Industrial purchasing agents sometimes resort to an informal system of competitive bidding which is often vicious in its results. Quotations are secured from a number of sources and one bidder is pitted against another in order to obtain the lowest possible price. This practice is justified by buyers on the ground that only in this way can they be sure that they are getting as favorable prices as their competitors. There is no doubt that this practice has done much to disrupt the price structure of many industries so that no supplier can make a fair profit. Although purchasing agents are often criticized for their use of such tactics, the major responsibility would seem to rest with weak-kneed suppliers who refuse to adopt a firm price policy.

There are many instances on record where concerns which have reputations for setting fair prices and sticking to them have been favored by purchasing officials over irresponsible price cutters. Conversely, certain buyers who have become known as "price chisellers" have found themselves seriously embarrassed by their inability to secure quotations from reputable suppliers who object to their practices. In this way, also, the purchasing practices of a concern, regardless of the volume it buys, make it a worth while or a poor prospect for sales solicitation.

Reciprocity as a selling policy is discussed in Chap. I but the influence of this policy on purchasing deserves mention at this point. It is obviously useless for a vendor to solicit business from a buyer if he knows that the buyer is constrained by reciprocal arrangements to place his orders elsewhere. From the buyer's point of view, this may result in his loss of touch with actual market conditions and in the paying of excessive prices. From the seller's side, it is highly important to ascertain where such reciprocal relations exist and to avoid needless expenditure in seeking unobtainable business.

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CHAPTER III

DISTRIBUTION CHANNELS

Industrial goods are distributed through one or more of three main channels:

1. Direct from producer to user.
2. Through functional middlemen who act as agents of the producer but do not take title to the merchandise they handle.
3. Through wholesalers or jobbers who buy from the producer and resell to the user.

The choice of distribution channels depends on many factors. In point of dollar volume, probably more than half the industrial sales are made directly by the producer. The decision as to whether to deal direct or not involves primarily economic factors. The relatively small number of customers and the relatively large size of the individual transaction usually permit direct contact without incurring an excessive ratio of sales expense. The increasingly important part played by engineering service makes for direct relations. In many cases, particularly with major equipment and fabricating parts, the product is not entirely standardized but is made to the individual customer's order. The introduction of a third party in such transactions would not only consume additional time but it would often result in a lessened degree of user satisfaction.

Conditions Favoring Direct Sales.—In actual practice the following factors are apparently important in influencing manufacturers to sell direct to users:

1. A small number of potential users.
2. A large average unit of sale.
3. A market concentrated geographically.
4. Large and well-rated buyers.
5. A need for considerable technical advice or assistance in making the sale, installing the product, or demonstrating its use.
6. A need for expert repair service, quickly rendered.
7. High position in the customer's organization of the keymen who decide on purchases.
8. The need of educating buyers to a new idea or new method.

Conditions Favoring the Use of Functional Middlemen.—An industrial seller may be induced to use functional middlemen if one or more of the following conditions exists:

1. The need for specialized knowledge of and contact with specific markets which cannot economically be secured by the individual producer.
2. Financial weakness of the producer.
3. The need of a small unknown producer to secure recognition for his product through its endorsement by a favorably known dealer.
4. The existence of a thin market, making sales expense prohibitive for the producer of a single article.

In semidirect marketing, involving the use of functional middlemen, the producer retains title to the merchandise he produces. He usually performs the functions of storage and delivery, and sometimes of credit and collection, and in effect merely hires an agent to represent him in securing orders. There are many varieties of functional middlemen, and there is a great deal of confusion of terms and titles. The following definitions, however, illustrate in a general way the functionaries in this field and their activities.

Brokers.—Brokers, or commission men, play a part in certain of the primary-materials markets and in the markets for some fabricating materials and operating supplies. Their chief function is to provide expert knowledge of the grades of the product, of market conditions, of sources of supply, or of all of these. The broker never has either title to or physical possession of the goods involved in the transaction. His function is to bring together buyer and seller and to help them to arrive at a basis of agreement. He assumes, as a rule, no credit risk. He is usually paid a commission by the manufacturer for whose product he finds a customer. In some cases he may be retained, and his commission paid, by the buyer. Brokers play an important part in the sale of unfinished cotton cloth, or "gray goods." By their expert knowledge of buyers' needs and of conditions of supply and manufacturing facilities of the various mills they save trouble and expense to both buyer and seller. Their services are principally of value in those trades where the product is standardized by grades but unbranded, and where prices are subject to considerable fluctuation.

Selling Agents.—Selling agents, or commission houses, are used by many manufacturers in lieu of maintaining their own sales

organizations. They do not take title to the merchandise they sell and they receive their compensation on a commission basis. Where the broker ordinarily acts to bring buyer and seller together in a single transaction, the selling agent usually undertakes to find buyers for the entire output of the one or more producers represented. Some selling agents represent only one producer, and constitute, essentially, independently operated sales departments. Others represent groups of producers of supplementary but noncompetitive lines of merchandise. In a few cases selling agents represent two or more competitive producers. In such cases conflicts of interest are likely to arise which seriously prejudice the efficiency of the arrangement.

The services rendered by selling agents to the producers they represent vary widely according to trade customs and to individual arrangements. The chief function of a selling agent is to maintain an adequate selling organization. In some cases the agent also takes over the merchandising function, as in styling the lines put out by textile mills. In this connection an elaborate program of market research may be carried on. In a few cases the selling agent assumes practically entire control over the client's production schedules. Since many of the producers employing selling agents are small or inadequately financed, it is rather common to find the selling agents assisting in financing. This is done either: (1) by endorsing notes for the client so as to enable him to secure bank loans or to obtain them at lower interest rates; (2) by buying the uncollected accounts of customers for cash; (3) by making direct advances on the products handled before they have been sold. The functions of credit and collections are also often assumed by selling agents.

For each of these services the agent usually receives a separate commission. For selling alone in the textile trade a 2 per cent commission appears to be about the minimum. This may run to as high as 5 or 10 per cent in the case of novelty fabrics selling in small volume. Another commission is charged for loans or advances, or for endorsing the client's paper. Where the credit risk is undertaken there is also a further commission for the collection of accounts.

The selling agent is particularly strongly entrenched in the textile industry. This is probably due in large part to the historical development of the industry and to the fact that so many producers are too small and ill financed to undertake their

own marketing activities. Also important, no doubt, is the interlocking ownership of many mills and selling houses. For many mills it is much more economical to employ a selling agent, part of whose overhead is met by other lines, than it is to maintain a sales department.

Selling agents are important outside the textile trades in copper, coal (both anthracite and bituminous), lumber, paper, and canned foods.

Factors.—The factor is a specialized marketing agency concerned exclusively with the rendering of financial services to producers or selling agents. Factors operate principally in the New England cotton and woolen goods trade, in raw cotton, and in naval stores.

Factors nearly always guarantee accounts and discount customers' bills, thus enabling the producer to extend credit without raising additional capital. In essence, the factor buys the producer's accounts, subject to approval of his credit department, advancing in cash from 75 to 80 per cent of the amount of the invoice upon shipment of the goods. Under this plan, bills are rendered either by the producer or by the factor and collections are always made by the latter. Upon collection of an account the factor deducts his advance, plus interest and commissions, and remits the balance to the producer.

The factor also frequently advances cash on merchandise inventories, taking legal possession of the goods so hypothecated, releasing the goods for shipment as they are sold and accepting the invoices to buyers as alternate collateral. In all of this financing the factor renders a service superior to that of the ordinary commercial bank. Because of his more intimate knowledge of the trade he can advance a higher percentage of the value of inventories or accounts receivable.

Manufacturers' Agents.—The manufacturers' agent normally represents several producers of noncompetitive lines. He does not, like the selling agent, undertake to dispose of the entire output of the producer, but rather to represent the manufacturer in a limited territory. The manufacturers' agent does not take title to the goods he sells but he may maintain a stock on a consignment basis. He is usually limited by his contract as to prices and terms of sale. The range of his functions is more limited than is the case with the selling agent. The manufacturers' agent sells within his circumscribed territory, fre-

quently warehouses, and sometimes services the product. He rarely performs other functions.

The manufacturers' agent is a particularly valuable intermediary to the small concern producing a narrow line of industrial goods, the sales of which are not sufficiently large to justify the maintenance of a separate sales force. The employment of a manufacturers' agent is in effect the pooling of sales efforts with a group of other similarly situated producers.

Even relatively large manufacturers of industrial goods frequently find it profitable to employ manufacturers' agents to represent them in distant territories or in areas not highly developed industrially. The use of a controlled sales force in dense markets and manufacturers' agents in thin markets is very common.

The manufacturers' agent is also of great use to a new manufacturer or to a concern bringing out a product in a field where it has no established reputation. The manufacturers' agent who is well known and highly regarded lends to the unknown product a measure of prestige which often suffices to introduce it where it would otherwise fail.

Conditions Favoring the Use of Wholesalers or Jobbers.—The existence of any of the following conditions is very likely to lead to a decision to use wholesale distributors:

1. A large number of potential users.
2. A small average unit of sale.
3. Need for rapid delivery.
4. Highly standardized merchandise.
5. Small buyers of doubtful credit rating.
6. A well-known product requiring a minimum of active sales pressure.
7. An article repurchased at frequent intervals.

When industrial goods are marketed indirectly through the use of wholesale merchants or jobbers who take title to the merchandise and resell it to users, the manufacturer sacrifices control of the selling of his product for economy. The functions of the industrial-goods wholesalers are essentially the same as those of the wholesalers of consumer goods:

1. They assemble goods from many sources for resale. A mill supply house may carry as many as 20,000 items.
2. They usually maintain sales forces which are in active contact with
 - industrial customers. In some cases they correspond more closely to retailers of consumer goods, maintaining only inside sales forces.

3. They carry warehouse stocks.
4. They deliver merchandise to their customers.
5. They extend credit and make collections, assuming the entire risk themselves.
6. They usually issue catalogues, and sometimes carry on other forms of local or trade advertising.

Like wholesalers of consumer goods, they are seldom in a position to promote aggressively the sale of any particular product. A manufacturer using industrial wholesalers, if he desires to stimulate the sale of his product, must usually depend on the use of advertising or missionary salesmen, while the wholesale merchant merely supplies the added demand which is thus created. Occasionally industrial-goods wholesalers take exclusive agencies for certain lines, and in such cases do a certain amount of promotional work.

Mill Supply Houses.—The mill supply house normally carries a rather wide line of equipment or supplies which are purchased from many sources and sold as a rule horizontally to many types of industrial buyers. A study made for the Joint Merchandising Committee of the Mill Supply Business in 1931 listed 1,799 distributors of this type. Of these 871 handled industrial goods exclusively, while 928 represented supply departments operated by wholesalers also serving other fields. Most of these distributors maintained sales forces, operated warehouses in which they carried diversified stocks, and offered credit and free delivery service in local areas. One large mill supply house in Chicago lists 23,000 items, divided among 650 major lines.

As a rule mill supply houses handle only orders too small to be handled directly by the manufacturer in economical fashion. However, in some cases they take orders for large amounts which are filled by drop shipments from the manufacturer. Of 1,243 industrial buyers questioned by R. M. Gattshall of the Republic Rubber Company, 540 habitually bought from mill supply houses; 675 bought direct from manufacturers. It is estimated that 34 per cent of all supply items are bought from distributors of this general type.

Specialized Merchants.—Besides the mill supply houses handling a variety of lines and selling to a variety of industries, there are also many types of industrial distributors which fall into two general classes:

1. Those which handle a single type of merchandise sold horizontally to a variety of industrial buyers.
2. Those which handle one or several lines of merchandise sold vertically to a single industry.

Examples of the first type are the wholesaler of industrial chemicals, the paper jobber, and the steel warehouse. The second type is represented by the distributor of contractors' equipment or railroad equipment and supplies. The latter type is more likely to be found in industries with highly specialized buying practices.

Characteristic Distribution Methods. *Major Equipment.*—Because the sale of major equipment usually involves highly technical considerations and often special features of design or installation, it is common practice for manufacturers of such equipment to sell direct to users. For instance, in the sale of machine tools, according to the 1929 Census of Distribution, of 280 plants in the industry, 203 sell in this way and 117 sell direct exclusively. Sales direct from manufacturer to user accounted for 58.4 per cent of the value of all transactions, while 11.9 per cent more were through manufacturers' own wholesale branches, most of which probably sold direct to users.

Sales of machine tools through manufacturers' agents, selling agents, or brokers amounted to 15.9 per cent of the total dollar volume, with 18 of the 80 manufacturers who used these functional middlemen using them exclusively. It is unfortunately impossible to determine what proportion of the sales made by functional middlemen is made to users and what proportion to dealers. Manufacturers' agents are frequently used by small or little-known producers of more or less standardized installations. They are also used in many cases by larger producers in territories where prospects are few and widely scattered. The commissions paid to manufacturers' agents in such cases may run as high as 15 or 25 per cent, depending on the services rendered. They commonly handle from four to six noncompetitive lines and in many cases offer to manufacturers skilled sales forces and a detailed knowledge of conditions in their territories which would require much time and money to duplicate.

Some manufacturers of major equipment find it feasible to operate their own sales branches in important industrial centers. These branches ordinarily do not carry stocks of complete equipment but frequently carry stocks of repair parts and attachments,

and also serve as centers for control of salesmen. In the machine-tool field 11.9 per cent of the total sales volume was handled through such branches, which were maintained by 20 manufacturers and used exclusively by 7.

Dealers ordinarily do not play an important part in the sales of major equipment, but there are exceptions. Makers of standardized and relatively inexpensive installation items sold to small, widely scattered plants may find it advisable to use jobbers who sell other items to the same trade. Copeland cites

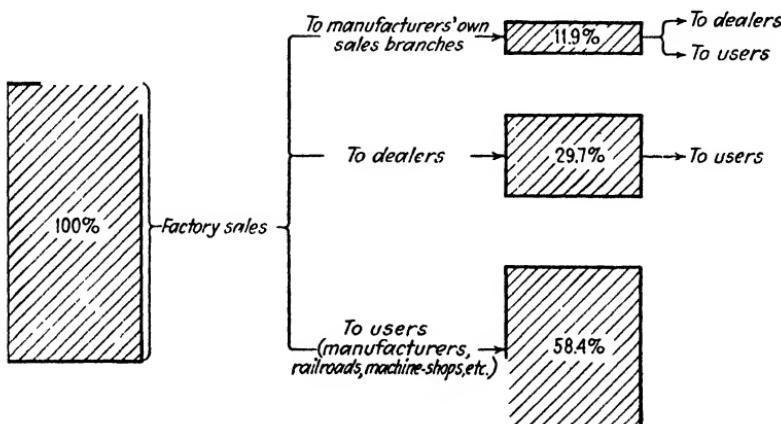


FIG. 6.—Distribution of sales, 1929, of the manufacturing plants in the machine-tool industry.

This report shows the sales channels used by the 280 manufacturing plants engaged primarily in making power-driven machines for cutting or shaping metals, such as lathes, planers, drilling machines, etc. Machine tools manufactured in this industry are designed for more or less general use, as distinct from machines designed for manufacturing special articles. Plants making portable hand tools (power-driven) for calking, riveting, and driving screws are also included. The sales of other products, such as parts and attachments, made by the plants in the machine-tool industry, are included in this report. (Source: U. S. Census Bureau.)

as an example the sale of printing presses to country print shops by jobbers who also handle tools and supplies. Of the volume of sales of the machine-tool industry in 1929, 29.7 per cent was sold through dealers. This percentage was probably built up largely by the inclusion in the industry of power-driven portable hand tools for calking, riveting, and driving screws, and by the inclusion of parts and attachments; both are probably more logically classified as accessory equipment. One hundred forty-five manufacturers sold through dealers, 66 using them exclusively.

Accessory Equipment.—Accessory equipment ordinarily requires aggressive selling. Therefore manufacturers in this field as a rule try to select agencies which are in a position to put

active sales pressure behind their products. However, the element of cost enters in, and in the case of articles of low unit value it may be necessary to use agencies which are less effective in creating demand. While typewriters and calculating machines are usually sold direct to industrial users, ordinary tools, which are sold in small units to a large number of buyers, are commonly distributed through mill supply houses or equipment dealers, or in some cases through wholesale hardware merchants.

A survey published by *Electrical World* indicates that it is advantageous for a manufacturer of electrical equipment to sell direct to only $7\frac{1}{2}$ per cent of the total number of prospects. In a typical industrial city with 580 industrial plants, 43 plants with a connected load of over 300 horsepower maintained their own electrical and mechanical departments for repair, maintenance, and installation, and constituted logical prospects for direct sale. The other 537 were determined to be more logically served by dealers or electrical contractors.

A typical example of accessory equipment is office furniture. The Census of Distribution report of 1929 sales in this field follows:

TABLE II

Method of sale	Selling value at factory	Per cent of sales	Number of plants	
			Total	Selling exclusively as indicated
Total distributed sales	\$43,288,000	100 0	99	
Sales to mfrs. own wholesale branches	2,395,000	5 5	5	2
Sales to dealers:				
Wholesalers	9,620,000	22.3	37	19
Retailers, including mfrs. own retail branches	20,654,000	47.7	53	31
Sales to industrial consumers	10,619,000	24.5	37	24
Sales made through mfrs. agents, selling agents, brokers, or commission houses.	6,233,000	14 4	21	8
Sales direct to sales branches, dealers, or consumers.	37,055,000	85 6	91	78

Office furniture commands a horizontal market, with a multitude of small users, most of whom it is not economically feasible for manufacturers to contact directly. Where the market is more vertical, there is likely to be a greater amount of direct dealing between manufacturer and user. This appears in the case of accessories and small tools used in the metalworking industries (see Fig. 7).

Operating Supplies.—Operating supplies which are purchased in large quantities are sometimes sold directly by producer to user. Most supplies, however, are purchased in small lots for quick delivery. In such cases it is the usual procedure to sell

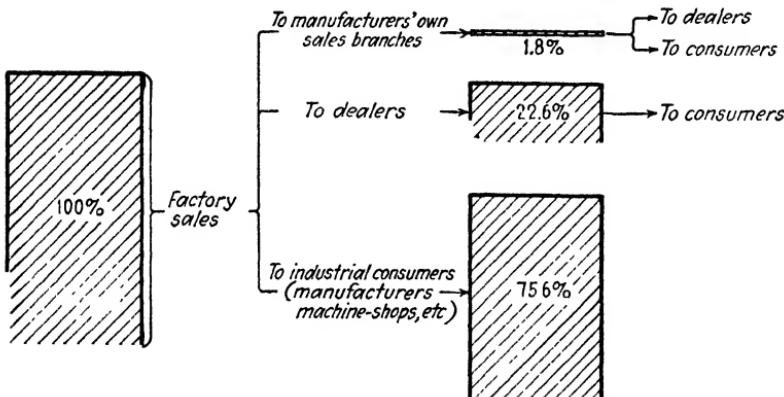


FIG. 7.—Distribution of sales, 1929, of the manufacturing plants in the machine-tool accessory and small metalworking tool industry.

This report shows the sales channels used by the 722 manufacturing plants whose principal products are punch press equipment such as subpresses, punches, dies, etc., milling cutters, reamers, chucks, drills, taps, threading tools, etc., as well as specially designed equipment, tools, and machinery. (Source. U. S. Census Bureau.)

through mill supply houses and other types of dealers. The problem of distributing operating supplies in the industrial field is in many ways analogous to the problem of marketing convenience goods to consumers.

Although it is impossible to segregate sales to the industrial and consumer markets, the sales methods of the producers of lubricating oils and greases (excluding petroleum refineries) as shown by the Census of Distribution, are generally indicative. Of 177 plants reporting, only 7 used functional middlemen, and 3 of these also used other methods. Eighty-nine sold direct to manufacturers, 30 making all their sales in this way. Nineteen maintained wholesale branches of their own; 84 sold to wholesalers, and 70 to retailers. There has probably been considerably

more tendency to sell lubricants direct to industrial users through the use of technical service than is the case with most operating supplies.

Fabricating Parts and Materials.—Because of the large quantities usually involved, the tendency is for fabricating parts and materials to be sold direct by the producer. In cases where less than carload lots are purchased, either by small fabricators or by large concerns for odd jobs or emergencies, jobbers sometimes

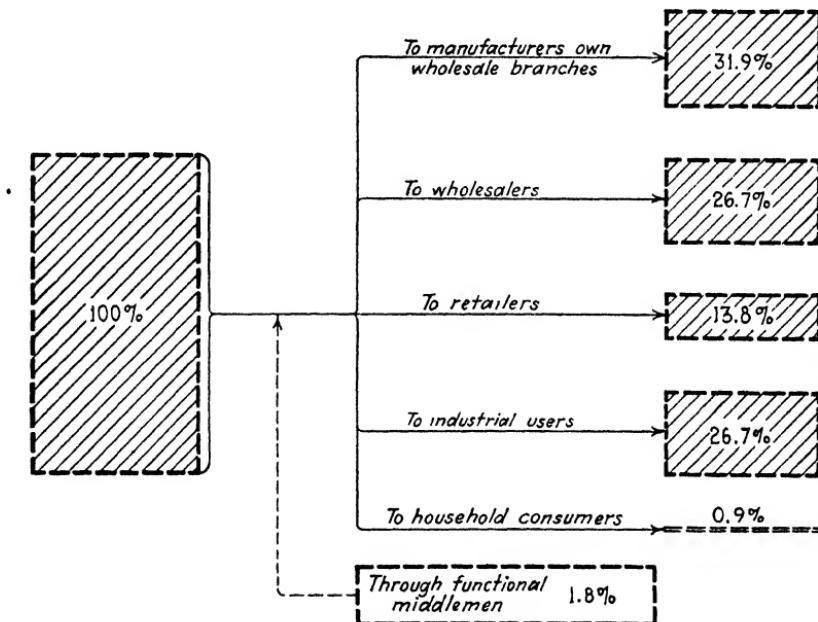


FIG. 8. Distribution of sales, 1929, of the manufacturing plants in the lubricating oils and greases industry (not including petroleum refining). (Source: U. S. Census Bureau.)

come into the picture. The steel jobber is an excellent example of the middleman basing his profit on emergency orders and special items. Functional middlemen also appear when an industry has many small producers unable to maintain direct contacts economically.

Process Materials.—In the case of process materials the choice of distribution channels is likely to be influenced by the size and location of the producing units, the degree of standardization of the product, and the need for technical service. There is a considerable variation in the distribution channels followed by

different materials. In common with other categories of industrial goods, there is a strong tendency toward direct dealing.

Primary Materials.—Agricultural materials in particular usually pass through a number of hands before coming to the indus-

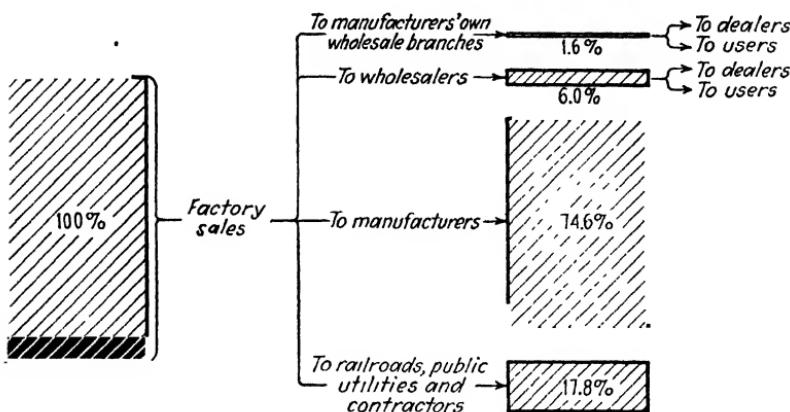


FIG. 9.—Distribution of sales, 1929, of the manufacturing plants in the iron and steel forgings industry (not including iron and steel forgings made in steel works or rolling mills). (Source: U. S. Census Bureau.)

trial consumer. Purchased as they are in large lots which must be of uniform quality, the first important functions are the concentration of materials from a number of sources and their

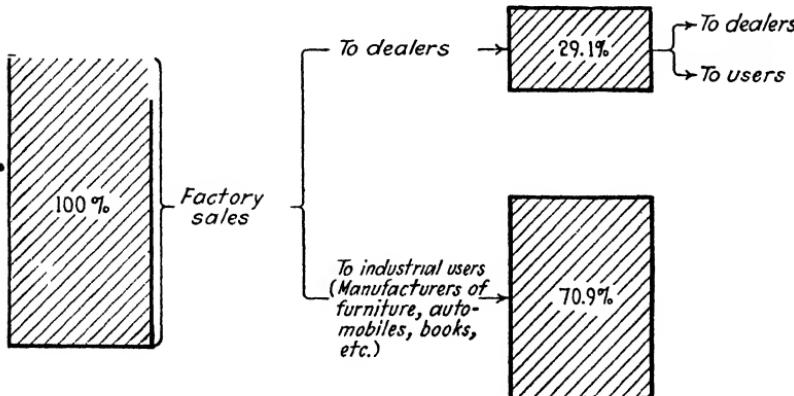


FIG. 10.—Distribution of sales, 1929, of the manufacturing plants in the artificial leather industry. (Source: U. S. Census Bureau.)

grading into uniform lots. Special intermediaries often assume the functions of storage and risk bearing. There is little similarity in distribution channels for these materials or in the functions

assumed by each intermediary. There is even less resemblance between distribution methods for products of agriculture and those produced from mines and other sources. Space does not permit a discussion of the various methods in use for particular commodities, each of which has its own particular pattern. The reader interested in this subject is referred to such works as Breyer's *Commodity Marketing* and Clark and Weld's *Marketing Agricultural Products*.

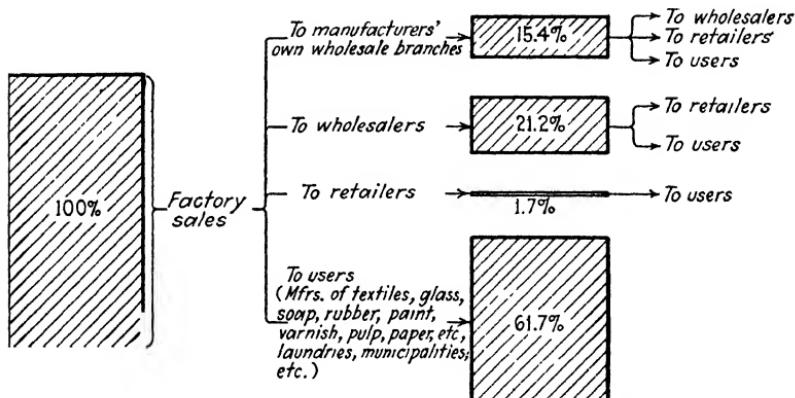


FIG. 11.—Distribution of sales, 1929, of the manufacturing plants making miscellaneous chemicals.

This report shows the sales channels used by the 551 manufacturing plants engaged primarily in the manufacture of all chemicals except those produced in allied industries.

The manufacturing plants included in this industry make acids, nitrogen compounds, sodium compounds, potassium compounds; general inorganic compounds including alums and the various salts from compounds of metals, rare earths, insecticide chemicals, etc.; general organic compounds, including the alkaloids and their salts; coal-tar crudes, intermediates, and finished coal-tar products; synthetic dyes, photographic chemicals, flavors, essential oils, perfumes, narcotics, pharmaceuticals, solvents (not provided for in a separate industry classification), etc.; plastics, such as the pyroxylin and casein plastics; synthetic resins, rubber substitutes, etc., including finished goods made by the plant that made the plastic; formaldehyde, glycerin, carbon compounds, ether, acetone, etc. (Source U. S. Census Bureau.)

Problems of Distribution Policy.—Producers of industrial goods frequently find that in serving different markets or even different strata in the same market it is advisable to use more than one channel of distribution. For instance, where a product is sold to both consumer and industrial markets, it is rare indeed that the same method of distribution covers both markets adequately. A miller of flour may find it advantageous to sell directly to large bakers, through specialized wholesalers to small bakeries, hotels, restaurants, etc., and through an elaborate wholesaler-retailer system to home consumers. A problem of great importance in such cases is how to reach each market

most efficiently without overlapping effort which creates friction between the various agencies used.

A vexing problem in many cases is that of competition between a manufacturer and his distributors. Although the business of certain large customers can often be secured only by direct selling, it may be necessary to reach smaller customers through intermediaries. In such cases it is imperative to develop a definite policy satisfactory to both manufacturer and distributor as to what business each shall take. Failure to formulate such a policy seriously disrupts the efficiency of the distribution system. Such a policy was worked out by the Bolt, Nut, and Rivet Manufacturers Association in conjunction with a group of leading jobbers, by which it was agreed that the manufacturers should solicit business only from certain specified large users. Many individual manufacturers have worked out similar understandings with their distributors but too often no settled policy is followed. Even when a definite policy is set up there are occasional causes of friction, as when a small customer developed by a jobber becomes a large user and demands the privilege of purchasing direct at a price which eliminates the jobber's margin.

Exclusive Agencies.—Another important problem of distribution policy concerns the choice between exclusive agencies and intensive distribution. A policy of using exclusive agencies is justified:

- 1. When aggressive selling is required from the distributor.
- 2. When the distributor is in a position to press aggressively the sale of the product.
- 3. When a single distributor is able to contact practically all the important buyers of the product in his territory.
- 4. When service is required from the distributor.

When the distributor is utilized merely to carry stocks of standardized merchandise of fairly rapid turnover, to fill orders, and to handle credits and collections, there is normally little reason for establishing exclusive agencies. In the case of many lines of merchandise, purchasing habits are such that a single exclusive distributor cannot hope to get business from more than a fraction of the potential customers in an area. In such cases a policy of intensive distribution is advisable.

A frequent complaint of industrial distributors is that manufacturers do not give them adequate assistance in doing their

job. The following quotations from a speech by Martin J. Wolf¹ express this criticism well:

Too many manufacturers say to us wholesalers: "Here is a product. Sell it!"

That viewpoint results in many manufacturers feeling the job is done when they load the wholesaler. "Load them and leave them" is too frequently their motto.

One of the lines we were carrying three years ago which was showing an inadequate sale was transformers. I said to the manufacturer's salesman: "Obviously there is a very restricted field in which we can sell your product . . . Bring in your sales manager. Have him come equipped to tell us whom to sell; where to sell; how to sell your transformers." In due time the sales manager called. In substance, I repeated what I have said here. Since nine-tenths of our salesmen couldn't sell the product, because their type of buyers never bought transformers, it seemed obvious that nothing but highly selective selling efforts would or could get results. To my astonishment he stood pat on the ground that he sold us, and left all else to us. He said his job began and ended with the sale to us. He wasn't interested in what we did, where, how, or when we sold the goods.

Let us analyze his view. His was one of 31,000 items we carried. No wholesaler could know all about every item or line he carried. The manufacturer certainly must realize the conditions under which we operate and gait his relationship toward the end of working to do a volume selling job. Need I say that the transformer sales of our company were not large?

There is, of course, another side to the picture. Many manufacturers complain about the tendency of many wholesalers to refuse to do much more than accept orders created by the manufacturer's own advertising or missionary sales effort.

The answer is obviously for each manufacturer to determine what is the ultimate market for the goods he makes, to study the way that market buys, to select those channels of distribution which can most efficiently reach that market, to choose the best available distributors of the proper type, and then support them with adequate educational activities and protect them from undue competition in their specific spheres. This program requires a thorough and detailed knowledge of the market and continuing sound policies intelligently administered.

¹ *The Wholesaler's Place in Industrial Marketing*, Industrial Marketing Series, No. 9, American Management Association, New York, 1930.

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CHAPTER IV

POLICIES AND OPERATING PLANS

Business in a competitive era has a considerable resemblance to warfare. Both involve association of individuals to achieve a common end. In both success is far more likely when individual efforts are closely coordinated. Coordination is best achieved by sound organization and intelligent direction. To continue the analogy, every nation has its national military policy, which dictates the general nature of all its activities. Within this comprehensive master plan, each commander in the field lays down his own general strategy. Each subordinate officer is subject to certain orders but also has a range of authority in which he plans his own operating tactics. The result is a cohesive force which secures the maximum of effectiveness from its resources. An army without a plan of campaign, without a policy, would quickly find itself drawn by a series of discontinuous local encounters into an engagement under disadvantageous conditions.

Importance of a Basic Policy.—The same is true of a business operating without a comprehensive and clearly defined policy. Success is largely a matter of acquiring and conserving good will. Particularly in the industrial field, the natural tendency of buyers is to continue to purchase from satisfactory sources of supply. This places a premium on the virtue of consistency. In fact, some sort of consistent policy is virtually forced upon every concern which survives for any considerable period of time. Yet policies may come about in two ways. They may be thoughtfully formulated, with an eye to the company's strong points and its weaknesses; or they may be permitted to evolve through a series of fortuitous precedents. For example, consider two competitors, A and B, both selling a certain class of industrial supplies. Both have been selling through jobbers, which is the accepted practice in the trade. To both come requests from large users for direct quotations. In Company A the matter has been considered, and, because of the importance of jobber good will,

the policy of not dealing direct has been adopted. Quotations are therefore refused. In Company B no policy has been laid down. A minor executive sends out direct quotations, from which orders are received. This direct business in the course of time amounts to a substantial proportion of Company B's total sales. As it increases, jobbers resent it. Finally an important group of distributors threatens to drop the line if direct selling is continued. Whatever course Company B takes means a considerable loss of volume. If it decides to adopt a policy of direct selling, that policy has in reality been laid down not by the major administrative group, but by the minor official who accepted the initial order.

Types of Policies.—A statement of policy sets the metes and bounds of an enterprise. In its most general form, it defines the basis upon which profits are to be sought. This fundamental decision not only affords a common ground for coordinating the activities of the various departments, but it also assures a continuity of purpose within the organization from one period of time to another. A certain tool manufacturer depends primarily upon the skill and precise workmanship of his mechanics to insure him a profitable place in the business structure. This policy has influenced the size, layout, and equipment of his plant, the selection of his personnel, and the type of market which he serves. He cannot compete on a price basis, but must confine himself to serving those customers to whom a high degree of precision is worth a differential in price. This must in turn influence the type of salesmen he employs and the kind and number of distributors he secures to represent him.

• A manufacturer of paper and wood pulp found his mills, built many years ago, unfortunately located with respect to both raw-material sources and markets. This company's basic policy is to expend a great deal of money annually on research and development work. It pioneers in bringing out new and improved products on which it can secure prices sufficiently high to offset its competitive disadvantages. This policy implies a high degree of attention to market research, to development of sources for new ideas, and to close service contacts with users of its products. These things in their turn have had an important influence on the nature of the marketing organization. Another manufacturer, differently situated, might with equal logic follow a policy of improving efficiency and reducing costs on

a few highly standardized products. His marketing emphasis would be on bringing volume up to the maximum. His major sales problem would be, not to find new markets, but to insure that all worth-while customers were visited with sufficient frequency.

To have a basic policy of this sort, clearly defined and recognized throughout the organization, not only helps immensely in coordinating the activities of the various departments of the business but prevents many of the frequent mistakes in strategy which are so obvious after the event. It is easy to find instances of manufacturers whose facilities require mass production of large volumes of standardized goods, yet who have sought expansion through introduction of small-volume specialties totally unsuited to their existing organizations. Sometimes, especially in loosely knit organizations, the trouble is in failure to disseminate information on company policy. Written statements of policy are seldom found. Without them, subordinates may misconceive, forget, or ignore the course which has been charted by the administrative official or group.

Besides the basic policy which is really nothing more than a decision as to the company's reason for being in business, there are many other matters which may properly be covered by a statement of policy. Credit may be extended liberally, or closely restricted. A company may seek to hold its prices stable over a period of years or it may follow the general market level. It may choose to confine its operations to a single industry or a limited geographic area or it may aim at security through diversification. It may set a limit upon its growth to avoid the keener competition which comes with increasing size or it may seek to become the dominant concern in its industry.

Departmental Policies.—Within the limits set by these long-term company policies, each operating division of the company will have its own set of policies. The sales department, for instance, may choose to sell through exclusive agencies or it may undertake to put the company's product in every possible outlet. It may decide to solicit business only from customers above a specified size, following a policy of "selective distribution." It may "protect" distributors by refusing to take business direct from users or by refusing to quote to users prices lower than those charged by the distributors. It may follow the policy that "the customer is always right," and without argument adjust any

complaints to the buyer's satisfaction, or it may endeavor to settle every complaint on the merits of the case. Such departmental policies should also be clearly set down in black and white and made available to the entire sales organization. To do so minimizes the number of decisions which must be made by the major sales officials and insures uniform treatment of all customers, thus reducing the friction which is invariably caused by unequal treatment. It also makes easier the interchange of salesmen or branch managers from one district to another. Large companies in particular frequently furnish their representatives with statements of sales policies as part of the sales manual. The practice is worthy of wider use.

The Importance of Flexibility.—The word "policy" implies a certain amount of rigidity. This is desirable in so far as it makes for consistency in handling similar situations. Carried to extremes, adherence to previously fixed policies may prove disastrous. Conditions change. Exceptional circumstances arise from time to time which may call for special treatment. Along with a bare statement of policy, therefore, there should be inculcated in the organization a thorough understanding of the reasons underlying the various policies. Reasonable proposals for modifications or exceptions should always be encouraged. Failure to do so may lead to the insulation of policy-making officials from actual current conditions. The power to decide cases involving questions of departure from established policies should not, however, be delegated.

Budgets.—In a somewhat different category fall those detailed operating plans designed to coordinate sales, production, and finance to yield the maximum profit through specific planning and scheduling of marketing activities. Business enterprises are devoting more and more attention to such plans, refining them down to minute detail. The report of the Committee on Recent Economic Changes recognized the tendency, remarking that

. . . until recent years it has not been at all the common practice among business concerns to attempt to plan their courses on paper in advance. . . . The distinct trend now, begun in a small way before the war, is to try to avoid future emergencies by making and examining the picture of the possibilities the future may contain. With some truth it can be said that modern hand-to-mouth buying has made hand-to-mouth thinking impossible.

The device known as the budget is the common vehicle for detailed quantitative operating plans. While it is, strictly speaking, a general administrative device, its importance is fundamental in the laying out of marketing plans. Basically a budget represents an attempt to plan for the most profitable use of men, money, and equipment during a definite future period. It involves, in the first place, an estimate of what conditions will be during the budget period and how they will affect the company's sales and profits. Any budget must be based on an estimate of income. For a manufacturing concern, therefore, the first step in formulating a budget must be to estimate future sales. The length of the period for which this estimate is to be made and the budget setup are influenced by many factors. If the product in question has a fairly stable market, plans may be made for as much as a year in advance. The length of the production process sets the minimum period for which plans are to be made. The availability of data as to past performance within the company and its industry plays a part in establishing the limits of visibility, as does the condition of the economic system, whether stable or chaotic. Most concerns try to forecast sales and set at least tentative budgets on an annual basis. In markets where the degree of risk is high or where economic conditions are uncertain a much shorter period may be advisable.

Sales Estimates.—In preparing an estimate of sales for the budgetary period, three major factors must be taken into consideration:

1. The characteristics of the market for the product in question and the position of the company in its market.
2. The influence of the business cycle upon conditions in the particular market.
3. The probable activities of competitors.

Market Characteristics.—In estimating sales, past records are of the greatest importance in the case of staple goods which have been marketed for a long time under identical policies and in which technical changes have not been frequent or revolutionary. In the case of new products or in markets where change is frequent, much emphasis must be placed on external-market research. In most cases a combination of sales history and external-market analysis will be found to give the best results. A study of the performance of the industry as a whole and of the

proportion of the market which the individual company has been able to command from year to year is always pertinent.

The Business Cycle.—Industrial markets are as a rule particularly sensitive to changes in general economic conditions. The manufacturer of major equipment enjoys very large sales when general business is good and credit is easy. When general business activity falls to a low level he suffers severely. New installations are not made, and replacements and even repairs are likely to be deferred. He must therefore endeavor to forecast as well as he can the trend of the business cycle. Upon his success in this respect depends his ability to profit from the upswings and to conserve his assets during the downswings. The processor of materials which go into the manufacture of consumer necessities may find the physical quantity of goods he sells little affected by the state of the business cycle, but the concurrent swings in the general price level may have a pronounced effect on his total dollar revenues.

Competition.—In no business where competitors exist can their activities be neglected. It is tremendously important to know their probable actions in regard to new products or product improvements, price changes, and changes in selling or advertising plans. This calls for constant vigilance by the sales manager. Field men should be urged to report scraps of competitive information. The market research division, if one exists, should direct a large share of its attention along this line. The organization should cultivate a network of trade contacts and provide for centralized collection and analysis of reported information. It should be remembered that competition often comes from outside a company's own industry.

Who Should Prepare Sales Estimates?—Sales-estimating practice varies from one company to another. As a general proposition, however, the following distribution of responsibility should prove effective:

Past sales records are most easily prepared by the accounting division, which handles the invoices from which the basic information comes. Some concerns set up a special Sales Statistics Division which may be in either the accounting or sales department.

General industry information and data on trends, etc., are best gathered by a man or group specifically detailed to the market research function.

Specific trade information such as local business conditions, status of particular customers, and the relative standing with buyers of com-

petitive products, can best be secured through salesmen or district managers who are in direct contact with conditions in the field.

Forecasts of general business activity may be secured from a number of business advisory services, or from the company's banking connections. Some concerns maintain economists to study business conditions and their probable effect on their companies' business.

Estimates of competitors' probable activities and their effect on sales can usually be assigned to the man in charge of the sales of a specific product or line.

Since the value of a budget as an instrument of control depends very largely on the reliability of sales estimates, a comprehensive plan and a closely knit organization for formulating these estimates is essential. It need not be expensive. Except in large concerns, special personnel is ordinarily not required. The important thing is to provide for the gathering and utilization of the information which almost every concern has easily available.

A "Cyclical" Forecast.—The Simonds Saw and Steel Company manufactures saws and other cutting tools and grinding wheels and materials. Its sales over a period of years paralleled very closely the total volume of industrial production in the United States. Its market has always been a truly horizontal one, for the cutting of wood or metal is basically important in almost every industry. Consequently company executives determined that, if some means existed for forecasting the volume of industrial production some months in advance, the sales of the Simonds Saw and Steel Company could be estimated with considerable accuracy. A study of business indices revealed that for several years the curve of commercial paper rates, reversed, had set a pattern which the index of industrial production followed with a lag of 8 to 12 months. This "lag" method of forecasting was not used as a quantitative measure of Simonds sales volume, but it helped the company to prepare for turns in the cycle. The method is of real value under normal conditions in business. Radical upward or downward swings of the business cycle are likely to distort the relationship, either by causing abnormal movements of money rates or by disrupting the ordinary inter-relations among industries.

A Forecast Based on Unfilled Orders.—The Walworth Manufacturing Company had considerable success for a number of years with another type of "lead-lag" relationship. This company, a manufacturer of valves and pipe fittings, constructed a weighted composite-index curve based upon the volume of

unfilled orders in 16 industries which use or create a demand for valves and fittings. This curve played an important part in estimating sales for each ensuing budgetary period. Its utility also diminished under the abnormal depression conditions subsequent to 1929. The extreme violence of the downswing distorted the normal relationship between the volume of business in one industry and that in another. Another factor was the tendency of industrial buyers to curtail purchases and live on their inventories during the initial stages of low volume and financial stringency.

A Composite Forecast.—One of the large electrical manufacturing companies builds its sales forecast primarily on the estimates of its salesmen as to what they will be able to sell during the forthcoming budgetary period. In late October or early November of each year, each salesman is called into conference with his district manager. Taking the salesman's customer list, each name is discussed. The salesman, on the basis of his knowledge of the particular situation, estimates what will be each customer's probable requirements of each product during each month of the year, and what proportion of the business he can reasonably expect to get. The district manager, armed with records of past sales to each account, makes the salesman justify each estimate with reasons. The estimates for individual customers are combined by the district manager into a total for each salesman, and these in turn are combined to give a territorial total. This is sent to the home office about the middle of November. Simultaneously, at headquarters, the sales manager in charge of each line of merchandise makes an estimate of his own, which he bases on past sales, his knowledge and judgment as to conditions in the industries to which his line is sold, and new plans of the company and its competitors. He also uses such external statistics as are available from trade associations, the Census Bureau, trade papers, and such special surveys as may have been made in the field. The company's chief statistician then takes the two estimates for each line, one from the field men, the other from the product specialist, and endeavors to reconcile them. He takes particularly into account the probable state of general business during the period for which the forecast is being made. He also gives some weight to the past record for accuracy of each of the various individuals whose estimates are under consideration. The final estimate then goes

to the company's budget committee to form the basis for the budget.

Revising the Estimates.—The sales department's estimate of what it can sell is not necessarily final. It is usually based on the assumption that the company's relative position in respect to competitors as to sales personnel, advertising, suitability of product, and price will remain constant. It may appear, after consideration of production costs and burden and after preparing an estimated balance sheet as of the end of the budgetary period, that a loss will ensue. If economies cannot be effected to offset this loss, the sales estimate may be revised upward. It then becomes the sales manager's job to figure how he can attain the desired volume, whether by addition of more salesmen, expansion of territory covered, planning of a special campaign, or price reductions. Or possibly it is decided to launch a new product or new model. In any event, revised estimates are submitted and various alternatives discussed until a budget is reached which shows a reasonable expectation of at least breaking even. Herein lies one of the great advantages of budgeting. Instead of waiting for a loss to appear at the end of an operating period, it endeavors to foresee the loss and provide against it.

The Sales Budget.—Once the company has finally adopted its budget, each department of the business finds itself with a definite task to be accomplished and a definite allotment of funds with which to accomplish it. The sales manager now faces the problem of allocating his funds to the various activities over which he has supervision. If his company manufactures to stock, he knows that the plant is counting upon a definite volume of orders for each product in each month, and has laid out its production schedule accordingly. He knows that the company's financial plan envisions total sales and collections of a planned amount each month. He realizes that these expectations are based on his predictions, and thus feels a far greater degree of responsibility than if planless operation were the rule. Incidentally, by forcing him to a rigorous scrutiny of his department's activity, the job of assisting in budget preparation has probably immensely improved his effectiveness as an executive.

He can now use this same incentive to efficiency throughout his organization. To each subordinate executive in charge of a particular product or territory he can assign a task and an expense allowance. He can, if he desires, go so far as to allot

to each salesman a quota and an expense budget. From each subordinate he can require a plan for achieving the desired result. He will frequently need to give counsel and to help in this planning, but in the end he will have an organization in which each man has studied his own job and worked out the best possible way of doing it.

Limitations of Budgets.—Budgets have their drawbacks. Estimates of future sales are rarely wholly accurate. The economic background may change suddenly. Competitors may make surprise moves. Unexpected technological changes, or revisions in prices of substitutes, may widen or contract markets. Consequently some provision must be made for revising forecasts and budgets in the event they prove unworkable under current conditions. Two things are of prime importance. First, up-to-the minute records are necessary so that divergence from budget figures may be quickly recognized. Second, advance commitments of all sorts must be limited to the shortest period consistent with operating efficiency. A method sometimes used is to set up a budget for a year in advance as a general goal, and to authorize commitments for parts, materials, and special services for only a single quarter, or even for a month in advance. Another method is to provide for automatic revision of the budget when the deviation of actual from planned sales exceeds a predetermined amount. The course to be taken by a particular company must depend largely on the length of its manufacturing cycle and the stability of its market.

The need for budgeting seems at first glance to be less, and the difficulty greater, with concerns which manufacture goods to order. Yet even in such cases there periodically arise questions as to the planning of finances, the provision of manufacturing capacity, the employment of additional workers for training, and other similar problems which require some sort of forecast of sales. There are many cases where human ingenuity seems unable to devise any satisfactory planning procedure. In most instances, however, some reasonable approximations at least seem to be feasible.

Scheduling Budget Preparation.—Practices in the actual drawing up of company budgets vary considerably. In most of the smaller companies which have adopted the device the work is done by the actual operating officials. This is true of some large companies although others delegate this work to selected indi-

SCHEDULE FOR "SETTING UP" BUDGET

Reason for steps Note:- For further description of each step, refer to "Budget Control Form"	Description of Steps to be Taken in Setting Up Budget	Data in Report Form						Schedule			
		Prepared by	On Form No.	Weeks	Ready To Do	Copies to -	Sept.	Oct.	Nov.	Dec.	Jan. (next year)
To determine the expected volume of sales (primarily upon which to base first budget and particularly to establish tentative revision of price list. (Under jurisdiction Mr.)	1. Data of present sales-in-units, by lines-sold by direct salesmen 2. Preliminary sales forecast in units by lines-sold by direct salesmen 3. Preliminary sales forecast in units by lines-sold by distributors 4. Preliminary sales forecast in units by lines-sold by Export Dept. 5. Preliminary sales forecast in units by lines-theater production 6. Preliminary sales forecast in units by lines-church only 7. Check the above preliminary forecasts with available statistics 8. Report of sales research studies, with recommendations (Dr. Committee) 9. Sales forecasts for preliminary budget in units by lines	Each Salesmen Distributors Export Dept.	H	3	Each Div. Mgr. Export Mgr.						
To determine factory and installation costs. (Under jurisdiction Mr.)	10. Data of past factory departmental expenses-itemized in dollars 11. Estimate of factory departmental expenses-itemized in dollars 12. Estimate of changes in factory production program 13. Estimate of material requirements, prices, etc. 14. Estimate of improvement program 15. Computation of unit production costs* based on above estimates (Also estimate of "non-specific accounts") 16. Estimate of installation costs based on forecasted sales	Each Dept Head	1	3	Each Dept Head						
To determine Adm. and Selling Expenses and set up budgeted financial statement of preliminary nature, also necessary revisions of prices and/or administrative expenses. (Under jurisdiction Mr.)	17. Data of past administration and sales departmental expenses-itemized, in dollars 18. Estimate of administration and sales departmental expenses itemized in dollars 19. Computation of preliminary Profit and Loss budget 20. Determination of change in unit sales price list and/or reduction of expense items-to insure an adequate operating profit	Each Dept Head	J	3	Each Dept Head						

- Note: Having determined preliminary budget and corresponding tentative price list, the final budget can then be set up as follows

To determine the final sales forecast upon which to base the yearly budget. (Under jurisdiction, Mr.)	21 Tentative sales price list, with request for final yearly forecast (dist. sales)	letter	1/2	Each distributor
	22 Tentative sales price list, with request for final yearly forecast (direct sales)	letter	1/2	Each Div. Mgr.
	23 Final forecast - in units, by lines - sold by direct salesmen (summation of quotas)	Each Div. Mgr.	letter	
	24 Final forecast - in units by lines - sold thru distributors (forecast - in units, by lines -)	Each Distributor Committee.	letter	
	25 Final corrected sales forecast - in units, by lines -	L	1	{
To determine the final budget. (Under jurisdiction, Mr.)	26 Computation of changes in factory costs (to comply with any change of sales forecast)	letter	1/2	
	27 Final Profit and Loss budget statement	Committee	K	1/2
	28 Necessary revisions in final budget to insure an adequate operating profit.		letter	(Copies to Each Dept. Head)
	29 Allowable departmental expense (factory) appropriations		K	1/2
	30 Allowable departmental expense (admin. and selling) - appropriations		letter	1/2
To determine the final budget. (Under jurisdiction, Mr.)	31 Statement of "quotas and base salaries" direct - statement	letter	1/2	Each Div. Mgr
	32 Revised Profit and Loss statements (actual) compared with budget amounts	H	end	(Sem. quarterly)

FIG. 12.—Schedule for budget preparation used by one company selling to the industrial market. (Courtesy of Bigelow, Kent, Willard and Company.)

viduals. Budget committees are sometimes set up, with representatives from the various operating departments. Much can be said for the practice of placing as much of the responsibility as possible on department heads, because of the necessity thus imposed of closely scrutinizing their departments' operations. The difficulty here, of course, is that current problems may put off careful consideration of budgetary problems. Delays in furnishing budget estimates are serious, as material from one department or individual is often necessary before the next can begin work. A definite schedule for the submission of data seems to be helpful. Such a schedule prepared for one company engaged in industrial marketing is shown in Fig. 12.

Planning Campaigns.—With the sales department's objective set and its available funds allotted by the budget, there comes the problem of planning activities for the coming period. Rather, perhaps, it should be said that planning of the campaign must go hand in hand with the preparation of budget estimates. First comes the problem of defining the markets to be covered. Most industrial products have possible applications in several fields. Some of these fields offer distinctly worth-while markets. Others are marginal in nature, promising a small profit, but distinctly less attractive. Still others show no immediate prospects of profits but have interesting potentialities for the future. How shall sales effort be divided among these fields? Planning only for maximum current profits may lead to undesirable concentration on one or two markets, the purchasing power of which may be impaired by future economic or technological changes. Devoting a certain amount of effort to the marginal and potential markets affords a partial hedge. Yet too great an investment of time and money in future possibilities will impair current volume and earnings. It is obvious that the sales manager faces here a nice problem of balancing his activities, and that his effectiveness in this respect depends largely upon an intimate knowledge of his markets.

Balance of Effort.—Assuming a unified control of all marketing activities, a desirable condition which does not always exist, the executive in charge faces another problem of balance. He has at his disposal various means of increasing the demand for his company's products. He may use personal salesmanship and advertising in different proportions. He may depend mainly on the pressure of salesmen's calls to sell distributors or on the

“suction” effect created by resale activities or advertising to users. In many cases he will use all of them, but unless they are properly balanced part of his expenditure will represent waste. Experience is a tremendous aid in judging whether a condition of proper balance has been reached. It is doubly valuable when supplemented by complete and timely records of sales activities and results.

Where a company's sales activities cover a wide geographic area there also arises the question of planning for balance of effort as between territories. The simple solution of allotting to each territory a standard percentage of the expected sales is far from adequate. One territory may be compact, requiring little traveling expense and time. In another, customers may be far apart, bringing the cost of a salesman's call to a much higher figure. The size of sales districts must be adjusted to the administrative capacities of branch managers. The size of salesmen's territories must be adjusted to physical conditions.

Obstacles to Effective Planning.—These, and a host of other problems discussed hereafter, are the primary concern of the man or men who find themselves in charge of a company's sales. They are best handled by advance planning based on careful study. There are, however, two rather basic difficulties which have prevented many companies from proceeding very far with broad plans of this sort. In the first place, the average sales executive is burdened with a mass of day-to-day problems which require immediate decision. Too often he has neither the time nor the energy to do much constructive planning. Perhaps part of the explanation also lies in the fact that men are seldom both doers and planners. Secondly, the organization of market information, internal and external, in many companies has either not been undertaken at all or has not developed to the point where it is of much use for effective planning.

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CHAPTER V

INDUSTRIAL MARKET RESEARCH

The Scientific Method.—Years ago Frederick W. Taylor and his coworkers started a revolution in business practice. They demonstrated the futility of thoughtless adherence to rule-of-thumb methods. They showed how to cut costs, increase production, widen markets, and enhance profits by applying to factory management the deliberate, impartial type of thinking done by a man of science in his laboratory. For a long time the marketing field seemed to be outside the scope of this revolution. In recent years, however, the scientific approach to marketing problems has been gaining ground rapidly. Briefly, the scientific method of attack upon a problem involves gathering all the available pertinent facts, analyzing and interpreting them, building a plan of procedure to reach certain defined objectives, and testing and checking the results at every stage. It stands for the rule of reason rather than the rule of thumb.

The Importance of Research.—If marketing problems are to be attacked in a scientific way there must be dispassionate analysis of the elements of each problem. Plans, to be worth the trouble of formulating them, must represent a careful balancing of probabilities. This requires facts. The gathering of these facts is the job of the market-research function. Perhaps applying the name “research” to this initial step in scientific management has created an unwarranted air of abstruseness in some quarters. In others it has encouraged expectation of too great precision in results. In spirit and in fundamental principles, research in marketing is the same thing as research in the laboratory of physics and chemistry. In the exactness of its results it is usually far inferior. Yet, capably and conscientiously conducted, it has in most cases a sufficient degree of precision to make it an indispensable tool of an alert management. By its use one manufacturer finds that there is too small a market for a proposed product to justify the installation of new equipment which would be necessary to make it. He saves perhaps a hundred times the

modest amount of his investment in fact-finding. Another finds a market the existence of which he had never suspected, and earns in a year increased profits sufficient to pay for ten years' maintenance of his market research department. Another installs a simple routine for collecting information from the field and thereby in the first few weeks learns of a competitive move before it is launched, and is enabled to be ready with a counter-stroke in time to save an important market.

The Place of Research in the Organization.—Market research need not be called by that name, nor need it be recognized in the organization structure. Professional specialists are not necessarily required to carry it on. Where it has been most successful it has begun with a thirst for facts on which to base important decisions. Busy officials have found that the job of gathering facts can be delegated either to capable assistants within the organization or to outside agencies. As the organization becomes sold on the value of facts and the research burden increases, the activity is quite frequently set up as a regular department. In small enterprises it may call for part or all of the time of a single individual; in large concerns elaborately staffed departments may be found. The practice sometimes adopted of superimposing a fully organized market-research staff on an existing organization has not seemed signally successful. The desire and ability to use facts must exist if market research is to be carried on successfully in any company.

The Scope of Market Research.—Research in business has three particular functions:

1. It helps to measure the effectiveness of present activities, to eliminate waste, and to find better and cheaper ways of doing things.
2. It leads to the uncovering of new possibilities of profit, to the doing of things which have not been done before. Examples are the development of new products, the discovery of new applications for existing products, and the redesigning of products.
3. It constitutes the principal safeguard against those sudden changes which can make a product or a marketing plan or an industry obsolete overnight.

Market research is concerned with all of these functions. Its activities may be classified into two broad types. First and most common is the analytical type of market research, which analyzes sales records and territorial possibilities, and determines the costs of handling different types of business and undertakings of a

similar nature. Beyond activities of this kind there is the synthetic type of market research which puts facts together and applies them in the development of new products or in changes of design better to meet consumer demand. Research of the analytical type is usually carried on within the confines of the sales department. Its activities are well defined, and its techniques reasonably well developed. The other type of market research involves relationships with other departments within the organization and possibly with outside agencies. The range of its problems is much wider. Its activities and its administration embrace many problems difficult of solution, for the handling of which few definite techniques have as yet been developed.

Internal Market Research.—The type of research activity most commonly found in industrial marketing is that which has to do with the compilation and interpretation of internal sales statistics. This is a logical first step. To chart a course for the future one must first know what is currently happening. Activity in this direction also most easily justifies itself by pointing out immediate opportunities for savings or for increased earnings. The breakdown of sales by time intervals, by territories, by classes of customers, by methods of distribution, by types and sizes of products, etc., and the comparison of current figures with those covering similar periods in the past afford valuable guidance as to the strong and weak spots in the sales structure. Such facts have value directly in proportion to the promptness with which they can be made available for use. They may be prepared by a special sales statistics section attached to the sales department. Where proper coordination can be attained, there is often a saving of time and effort if they are prepared in the accounting department, which initially handles the invoices from which most sales statistics are compiled. The preparation of timely records is facilitated, where volume of transactions permits, by the use of punched cards for machine tabulation (see Fig. 13). Preservation of fundamental data in this form has the further advantage that any type of analysis desired by sales executives can be prepared in a short time and at little expense. It is thus not necessary periodically to compile records which are not currently needed.

External Research.—Comparisons of current results with those of previous periods of time, or comparisons of results in one area with those in another, are sometimes helpful but often misleading.

A 10 per cent increase in sales over last year may represent retrogression, while a 10 per cent decline at another time may still mean an improved position relative to the rest of the industry. Today's performance must be measured in the light of today's conditions. Up-to-date yardsticks for marketing efficiency must be developed largely from data external to the company. One of the most important things for any company to know is the total amount of business done in its industry, so that it may have a standard for measuring its relative progress. Such information can usually be obtained from the Biennial Census of Manufactures, or from trade associations. Where it is not available directly in the desired form, it can frequently be derived from

ITEM	NO.	DAY	TR.	INVOICE	SALES ^{MAN}	CUSTOMER		CITY	ST.	QUAN.	COMMODITY	AMOUNT	COST	
						CLASS	CUSTOMER							
158-123512	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1	1 1 1 1 1
	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2
	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3	3 3 3 3 3
	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4
	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5	5 5 5 5 5
	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6	6 6 6 6 6
	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7	7 7 7 7 7
	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8
	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9	9 9 9 9 9

FIG. 13.—Example of a sales record card punched for machine tabulation. (Courtesy of International Business Machine Corporation.)

related data. For example, a producer of cellulose for nitration desired to know the total extent of the market for his product. No figures were available for the production of nitrocellulose or pyroxylin. However, it was known that the major uses for the product were in the manufacture of nitrocellulose lacquers, celluloid and other pyroxylin plastics, nitro rayon, photographic film-base, artificial leather dope, and explosives. Statistics were available from one source or another on the production or consumption of all of these. Conversion factors were obtained from various authorities, and the several figures were readily reduced to a common denominator of tons of cellulose consumed annually in nitration.

The Census of Manufactures is available only at two-year intervals, and there is a considerable lag between the collection of the information and its publication. It affords a valuable

guide to trends in industry, but, particularly in the less stable industries, is often not sufficiently timely to furnish an up-to-date

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TABLE 5.—PRINCIPAL MATERIALS CONSUMED IN THE SILK AND RAYON INDUSTRY, BY COST, 1929, AND BY QUANTITY, 1929, 1927, 1925, AND 1919, BY STATES

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. In the consumption of certain classes of materials, however, some of the "Other States" outranked some of those shown separately. The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials. See "Raw fibers consumed in textile mills" and "Purchased yarns consumed in textile mills," pp. 222 and 223, respectively.]

MATERIAL AND STATE	COST	QUANTITY (POUNDS)				MATERIAL AND STATE	COST	QUANTITY (POUNDS)			
		1929	1927	1925	1919			1929	1927	1925	1919
		\$267,027,348	\$4,473,231	\$26,277,925	\$26,260,726			\$44,857,027	\$23,551,027	\$2,156,453	\$2,000,267
Raw silk, total.....						Rayon, total.....					
Connecticut.....	14,745,694	3,410,120	3,000,000	2,244,157	1,777,775	Connecticut.....	8,071,006	3,246,208	2,720,227	2,000,270	
Massachusetts.....	12,040,708	2,909,177	1,657,795	1,319,200	1,106,943	Massachusetts.....	1,859,648	1,577,463	216,562	165,880	64,185
New Jersey.....	10,000,000	2,300,000	1,600,000	1,150,000	1,000,000	New Jersey.....	2,238,000	1,800,000	2,000,000	1,800,000	
New York.....	60,516,069	7,570,000	4,115,000	3,670,000	2,974,000	North Carolina.....	8,361,009	3,765,100	3,274,000	4,975,275	1,810,000
Pennsylvania.....	117,856,453	23,749,743	16,119,000	13,309,918	10,077,966	Pennsylvania.....	14,450,000	2,208,000	1,316,740	1,000,000	46,375
Illinois.....	10,000,000	2,000,000	1,000,000	800,000	800,000	Rhode Island.....	6,085,722	2,516,021	812,827	212,154	(1)
Virginia.....	4,111,340	743,257	424,417	345,211	(1)	Gilbert States (1929)					
Other States (1929)						Ala., Ark., Md.,					
Ala., Ark., Md.,						Ala., Ark., Md.,					
Mich., N. H., N.						Mich., Minn., N.					
C. G. Obs., N. H.,						C. Va., W. Va.,					
Tenn.).....						Tenn.).....					
Total.....	34,803,236	8,002,450	4,700,000	2,813,313	1,946,264	8,117,726	2,481,121	8,300,000	1,436,000	324,365	
Organic, spun and						Cotton yarn, total.....	8,121,621	12,368,000	16,828,767	15,300,174	17,000,013
and warp twist, total.....	48,475,089	8,432,134	30,329,137	19,341,616	6,152,480	Connecticut.....	8,000,024	1,365,000	3,262,000	2,000,000	4,000,000
Connecticut.....	2,480,082	385,713	480,000	1,000,158	385,400	Connecticut.....	8,000,024	1,365,000	3,262,000	2,000,000	4,000,000
Massachusetts.....	1,344,240	327,704	110,429	42,143	1,344,240	New Jersey.....	1,288,538	1,945,622	2,832,377	2,621,357	2,620,378
New Jersey.....	12,870,385	5,227,167	4,800,000	2,412,165	3,804,001	New York.....	1,074,808	1,804,821	1,870,000	1,516,521	3,000,000
Pennsylvania.....	12,000,000	2,000,000	1,000,000	1,000,000	12,000,000	Pennsylvania.....	1,074,808	1,804,821	1,870,000	1,516,521	3,000,000
Rhode Island.....	2,093,120	237,997	486,156	717,000	(1)	Rhode Island.....	615,126	1,082,254	1,472,700	1,000,745	716,195
Other States (1929)	21,045,479	3,595,758	10,613,906	8,295,758	1,424,652	Gilbert States (1929)					
Ala., Ark., Md.,						Ala., Ark., Md.,					
Mich., Minn., N.						C. G. Obs., N. H.,					
C. Va., W. Va.,						Tenn.).....					
Tenn.).....						Gilbert States (1929)					
Calif., Ill., Mo.,						Ala., Ark., Md.,					
Mich., Minn., N.						C. G. Obs., N. H.,					
C. Va., W. Va.,						Tenn.).....					
W. Va.).....						Gilbert States (1929)					
Spun silk, total.....	8,918,537	427,109	704,376	487,500	194,837	Other yarns, total.....	8,630,639	2,217,004	3,974,705	2,900,000	1,000,000
Connecticut.....	943,996	204,651	484,000	1,000,544	1,696,473	Massachusetts.....	84,152	27,867	12,000,000	(1)	(1)
Massachusetts.....	1,200,000	255,700	255,700	255,700	1,200,000	New Jersey.....	1,182,523	762,470	841,000	427,000	312,000
New Jersey.....	12,870,385	5,227,167	4,800,000	2,412,165	3,804,001	New York.....	1,074,808	1,804,821	1,870,000	1,516,521	3,000,000
Pennsylvania.....	12,000,000	2,000,000	1,000,000	1,000,000	12,000,000	Pennsylvania.....	1,074,808	1,804,821	1,870,000	1,516,521	3,000,000
Rhode Island.....	2,093,120	237,997	486,156	717,000	(1)	C. G. Obs., N. H.,					
Other States (1929)	21,045,479	3,595,758	10,613,906	8,295,758	1,424,652	Tenn.).....					
Calif., Mo.,						Gilbert States (1929)					
Mich., Minn., N.						Ala., Ark., Md.,					
C. Va., W. Va.,						C. G. Obs., N. H.,					
W. Va.).....						Tenn.).....					
Pierced acetate, cotton, and other waste.....	7,636,687	8,827,122	7,400,100	(1)	(1)	Gilbert States (1929)					

¹ Included in figure for "Other States" to avoid disclosing data reported by individual establishments.

² Not called for on schedule.

TABLE 6.—RAW SILK AND RAYON THROWN ON COMMISSION—QUANTITY, BY CLASS, BY STATES: 1919 TO 1929

(This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. In the case of certain classes of products, however, some of the "Other States" outranked some of those shown separately.)

STATE	RAW SILK THROWN (POUNDS)			STATE	RAW RAYON THROWN (POUNDS)			STATE	RAW SILK THROWN (POUNDS)				
	Total	Into	organize		Total	Into	organize		Total	Into	organize		
United States													
1919.....	36,456,492	4,862,193	14,909,978	16,654,321	6,456,403	2,005,933	824,027	1,288,812	174,119	(1)			
1921.....	27,963,571	9,711,704	7,511,264	10,751,268	2,005,933	1,278,213	824,027	1,288,812	174,119	(1)			
1922.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1923.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1924.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1925.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1926.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1927.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1928.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
1929.....	21,096,254	6,227,167	4,800,000	10,263,851	6,456,256	1,027,731	824,027	1,288,812	174,119	(1)			
New Jersey													
1920.....	2,360,040	609,878	609,883	1,370,879	234,424	2,005,933	824,027	1,288,812	174,119	(1)			
1921.....	2,131,240	383,769	436,672	1,218,200	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1922.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1923.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1924.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1925.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1926.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1927.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1928.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
1929.....	1,622,603	611,121	422,645	706,022	2,005,933	824,027	1,288,812	174,119	(1)				
New York													
1920.....	2,349,847	871,034	1,832,007	641,811	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1921.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1922.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1923.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1924.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1925.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1926.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1927.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1928.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			
1929.....	1,612,171	561,814	561,814	561,814	(1)	2,005,933	824,027	1,288,812	174,119	(1)			

FIG. 14.—A typical page from the report of the 1929 Biennial Census of Manufactures. This specimen page illustrates the value of Census of Manufacturers figures in establishing trends, and also in the comparison of a manufacturer's own sales figures with total sales by regions. These census data are seldom used to an extent comparable to their potentialities.

standard. Also, the nature of the industry breakdowns sometimes prevents a manufacturer from getting the statistics he

wants. In many cases trade associations compile production statistics which represent a substantial proportion of their industries and make these available to their members with a lag of one to three months. Many of these trade association reports are furnished to the Department of Commerce for publication in its monthly statistical bulletin, *The Survey of Current Business*.

For commodities which enter into world trade, the total domestic market may be determined by adding domestic production and imports and subtracting exports. Data of imports and exports are available in the annual volumes *Foreign Commerce and Navigation of the United States*, published by the Department of Commerce. In some cases, unfortunately, the figures on domestic production and those on foreign trade are not comparable, owing to differences in commodity groupings.

Other governmental sources of industrial information comprise special surveys and reports of the Department of Commerce or other departments, and reports of investigations by the Tariff Commission or the Federal Trade Commission in particular industries. A resource which is ignored by the majority of manufacturers is the mass of unpublished information available in the Census Bureau. No data which would directly or indirectly reveal the operations of any individual business may be disclosed, but, subject to this restriction, the Census Bureau has often furnished, at the inquirer's expense, special reports going into much greater detail than the regular published releases. It is advisable for a company's market-research executive to familiarize himself with the schedules used in gathering information for the Census of Manufactures and with the methods of punching the tabulating machine cards in the Census Bureau. Beyond these public sources are special studies made by the trade journals and business periodicals. In most cases these are rehashes of government or trade association data, but sometimes they result from original investigations. Still other material is sometimes obtainable from research organizations maintained by colleges and universities. Such sources are well summarized in the Department of Commerce publication entitled *Market Research Agencies*.

Once a company has measured its position relative to its industry, it becomes necessary to develop more specific standards by which the performance of divisions of the marketing organization can be evaluated. It is usually desirable, for instance, to

TABLE 2.—NUMBER OF WAGE EARNERS EMPLOYED BY MANUFACTURING ESTABLISHMENTS, BY COUNTIES, 1929

County	State	Number of wage earners*	Rank
Cook	Illinois	462,056	1
New York	New York	329,067	2
Wayne	Michigan	269,426	3
Philadelphia	Pennsylvania	244,655	4
Cuyahoga	Ohio	159,304	5
Allegheny	Pennsylvania	156,098	6
Kings	New York	147,306	7
Milwaukee	Wisconsin	117,513	8
Los Angeles	California	114,651	9
St. Louis City	Missouri	107,468	10
Providence	Rhode Island	107,146	11
Total--11 leading counties		2,214,690	1st 1/4
Middlesex	Massachusetts	97,815	12
Erie	New York	92,746	13
Essex	New Jersey	91,974	14
Hudson	New Jersey	91,181	15
Baltimore City	Maryland	86,018	16
Hamilton	Ohio	85,252	17
Essex	Massachusetts	84,409	18
Worcester	Massachusetts	83,692	19
Suffolk	Massachusetts	82,216	20
New Haven	Connecticut	79,447	21
Bristol	Massachusetts	76,845	22
Summit	Ohio	67,294	23
Hartford	Connecticut	65,485	24
Monroe	New York	63,232	25
Fairfield	Connecticut	58,372	26

* Average during the year.

FIG. 15.—A page from the series of reports entitled *A Basis for Establishing Industrial Sales Territories*. For manufacturers selling to horizontal markets, it is frequently possible to develop a correlation between sales possibilities and some factor such as number of wage earners, connected horsepower, or value added by manufacture. Statistics of the sort exemplified in this table can then be applied to aid in the proper balancing of sales effort against existing potentials.

know the potential market in each territory, or in each class of customers, or for each use to which the product is put. Determination of territorial markets is often facilitated by the use of various indices, such as number of plants, workers employed, connected horsepower, value of products, etc. Two valuable aids are the *Market Data Handbook of the United States*, and *A Basis for Establishing Industrial Sales Territories*, both publications of the Department of Commerce. For products used in several industries the potential market in each can sometimes be determined by relating the use of the product to some characteristic index of activity of each industry. Such a relation may be established by taking several concerns known to be buying 100 per cent of their requirements from the company making the study and comparing their purchases with various factors, as number of employees, connected horsepower, etc., until an index is found which gives a fairly general correlation. For instance, in a certain industry it may be determined that for every ten factory workers there is one office employee and that for every three office employees one typewriter is purchased annually. The potential market for typewriters in that industry then may be taken as one-thirtieth of the number of wage earners employed. Such methods obviously permit no more than approximations, but, if the underlying assumptions are thoroughly checked, they constitute satisfactory procedures for securing a basis for control.

Particularly where a product sells to a horizontal market, an analysis of consumption by uses to which it is put affords a valuable means of measurement. A sound approach to the determination of the total market for a specific kind of lumber is the analysis of the product's uses, as in residential construction, concrete forms, crates and packing boxes, etc. This type of analysis not only helps to define more clearly the total and territorial markets, but it frequently helps to measure the potential market for the various grades and sizes. Further, the comparison of results obtained by several different methods leads to a highly accurate conception of the entire market.

Apart from estimating the size of the potential market and its subdivisions, another job of market research is to analyze the competitive situation. This involves the collection in every legitimate manner of information regarding competing concerns, their production, their capacity, the nature and effectiveness of their productive and distributive organizations and equip-

ment, their financial situation, etc. It is frequently possible through alertness in seeking out and analyzing such information to forecast moves of competitors and to be prepared to meet them. Certainly the maximum efficiency in operating a business requires not only a reasonably good estimate of potential consumption, but also a knowledge of available capacity in the industry and the likelihood of its being put into use. Sources of competitive information are many and varied. Its fullest development requires the piecing together of a large number of small and seemingly unrelated bits of information. Such bits are secured from trade periodicals, from gossip at trade gatherings, from financial reports, and, probably most important, from reports by salesmen of items of information obtained from the customers upon whom they have called.

With the importance of the individual customer in most industrial marketing it becomes more or less imperative to build up a centralized fund of information from the knowledge otherwise uselessly scattered among individual members of the sales force. The gathering of such material ties in well with the system of sales control. By providing on salesmen's report blanks opportunity for the inclusion of certain desired information and by educating salesmen to what is required, it is possible to set up a routine procedure for the gathering of a mass of valuable trade information. By combining this with a similar routine for combing published material and collecting pertinent items, it is possible in many cases to define the market in great detail and with a high degree of accuracy. One company, for instance, in a period of two years was able to account definitely for 85 per cent of the total consumption of the products it made. It knew the normal consumption of each of these products by every customer and prospect of importance, from what sources each user purchased his supply, what grade was used, and what price was paid. By integration of these data on individual customers and comparison with total sales of the industry it was possible to evolve a fairly complete picture of the business of each competitor, determining his strong and weak spots territorially and in terms of products and grades. In this connection market research functions as an "intelligence division" for the sales department.

Salesmen in Market Research.—There has been a great deal of discussion as to the advisability of using salesmen as a source of

market-research data. The setting up of a routine method of collecting pertinent material from them, as outlined above, is merely an extension into the marketing field of the technique used so effectively in the factory by Frederick Taylor and his followers. Their use to this extent seems thoroughly justified provided care is taken to evaluate the information they submit. Their use as field investigators in a specific survey is open to more question. The following advantages of such use of salesmen have been advanced:

1. The field sales organization constitutes a larger force than is ordinarily available for specific research work, and can thus gather the desired data more quickly.
2. The salesmen are already traveling in the field and can undertake the research work with little or no additional traveling expense.
3. They frequently have already established contacts with the people from whom information is to be sought.
4. The use of salesmen to gather market information is an indirect way of educating them, particularly when the study concerns a proposed new product.
5. The use of salesmen in research work during dull seasons affords a means of holding the force together, or, if they are carried anyway, furnishes an opportunity for doing research work with no extra labor cost.
6. The salesman who comes seeking information may secure increased prestige in the buyer's eyes, and may get together with him in discussion of broader topics than a specific sale involves.
7. It is sometimes claimed that the morale of the salesmen is enhanced by the feeling of responsibility resulting from the assignment of research work.

On the other hand, there are very definite disadvantages in the use of salesmen as field investigators.

1. Most important is the fact that a good salesman is almost never unbiased. His entire task is one of convincing the buyer. Consequently salesmen are usually subject to preconceived opinions or prejudices which color their interviews and often render the information they submit misleading.
2. There is a well-defined technique of conducting an interview so as to get the subject's honest opinions and to bring out all relevant facts. Even discounting the salesman's tendency to prejudice, he may fail through inability to get a complete, unbiased story.
3. Time spent in research work is time lost for selling activities, which may result in a loss of sales volume.
4. Salesmen who work entirely or in part on a commission basis are usually unsympathetic toward research work which may curtail their earnings. It may be neglected, or hastily and inadequately done, or it may result in discontent.

SALESMAN'S REPORT - RESEARCH COPY		FORM NO. 886	
SALESMAN	REGIONAL OFFICE	DATE	REPORT NO. _____
FIRM	STREET	VISIT <input type="checkbox"/>	TELEPHONE <input type="checkbox"/>
NO. AND STREET	CITY	LETTER <input type="checkbox"/>	THIS FIRM INTERVIEW NO. _____
INTERVIEWED	TITLE	BUSINESS <input type="checkbox"/>	STATE OR PROVINCE
KIND OF BUSINESS	WHAT IS MADE FROM OUR PRODUCTS?	% OF NORMAL	(REVISE & EVERY TIME REPORTING)
COMPETITIVE PRODUCT IN USE (OR QUOTED)		COMPETITIVE SELLER	PRICE DELIVERED
			NORMAL MONTHLY CONSUMPTION
			CORRESPONDING BROWN CO. PRODUCT QUOTED DEBD.
EXPLANATION OF WHY WE ARE NOT GETTING AT PRESENT			
BROWN CO. PRODUCTS		CURRENT ADDITIONAL BUSINESS WE'D LIKE TO GET MONTHLY	PROGRESS INDEX
		UNIT	CURRENT WITH PAST
		PRICE	SPECIFIC CONSTITUENT AFFILIATION
		QUALITY	INTEREST IN INVEST
		SELLERS	RISK
SHOULD CALL EVERY			
REMARKS ON PLANS FOR GETTING THE BUSINESS AND PROGRESS BEING MADE:			
OBTAINED ORDER FOR			

Fig. 16.—Salesman's report form, a carbon copy of which goes to the market-research department for the compilation and revision of market data. (*Courtesy of Brown Company.*)

5. Research work furnishes a convenient alibi for loss in volume or failure to contact prospects as scheduled, and thus may weaken the sales-force control.
6. Buyers are likely to be suspicious of salesmen's inquiries and withhold data which they would give to a regular research worker.

Salesmen have been used effectively in the collection of market-research data in a number of cases. Usually these cases have involved mainly the collection of facts and figures in connection with their regular sales calls. In such work, where special skill in interviewing is not required, results can often be secured more quickly and cheaply through the sales force. Where the collection of opinions or the gathering and evaluation of technical information is required, it seems that the work is best handled by trained market-research workers.

Outside Consultants.—Another subject of current discussion is the advisability of using outside counselors for market research. Where questions requiring the exercise of special skill in this field arise only at infrequent intervals it would seem advisable to employ outside help rather than to try to maintain a qualified man within the organization. The outside consultant has a detached viewpoint which is often an advantage when decided opinions exist in the company's own organization. On the other hand, it is frequently difficult for a consultant to get a sufficiently comprehensive picture of the situation within the company so that the information gathered can be intelligently interpreted in terms of desirable action. Somewhat along the same line, much market-research work is carried on for manufacturers by advertising agencies. A great deal of this work is of a distinctly high order. In the industrial field its value is enhanced by the fact that in many, if not most, cases such work is done for specific fees. Where it is done as a gratuitous service, the agency deriving its return from commissions on space, the resulting work must be evaluated in the light of the incentive, which unquestionably must exist, to allow the desire for profit to influence the nature of the conclusions.

In general, it is probably more desirable for the concern engaged in industrial marketing to carry on its own market-research work. When a company has not developed any facilities of its own for this kind of work it may advantageously make temporary use of outside agencies. When information must be secured speedily, the professional research worker can secure the

pertinent facts in time for them to be useful, whereas the beginner must first learn where to seek his information. When a company has decided to undertake market-research work, it may well secure competent professional assistance in organizing the activity and helping to find or train the proper personnel.

Organization of a Market Research Department.—The foregoing description of the work of market research indicates that it functions in two ways. In the first place, it gathers facts for

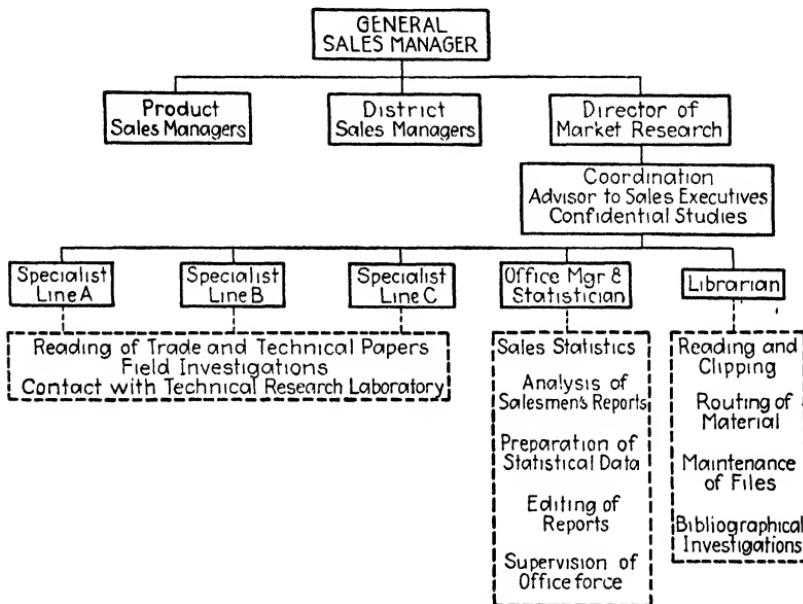


FIG. 17.—Organization chart showing how one successful market-research department was related to the sales department and how duties were divided among the six employees.

sales executives to use in planning and in checking results. Secondly, it pioneers in the exploration and mapping of new markets. In this sense there is a close analogy to the technical research division, in which we find research directed at process control and improvement, and also development work. From the standpoint of operations, market research involves both desk and field work. When more than one man is employed, the problem of how best to divide responsibilities arises. With two men, it is usually best to assign the office work to one, the field work to another. With more than two, it is possible to develop specialists either on product lines or on specific subjects,

such as measures of market potentials and setting of quotas, collection of information on competitors, etc. One outstanding

Requisition for Market Information	Serial No. _____
	Subject No. _____
	Date _____

To the Department of Market Research:

Please supply information for the _____
Department as follows:

1. Subject or product _____

2. Specific information wanted:

3. Suggested sources of, and procedure for getting information:

4. Date when report is asked: _____
(Signed) _____
Approved by (a) _____
(b) _____

Assigned to _____
Hours worked _____

FIG. 18.—A requisition form used by one company in controlling market-research projects. This requisition is signed by the executive requesting a report, and approved by his department head. The director of market research makes an approximation of the cost of the job. If the cost promises to be nominal, the requisition is assigned to a research worker. If the cost is estimated to be considerable, a check-up on the probable value of the work may be made before the investigation is authorized.

ingly efficient industrial market-research department was organized as shown in Fig. 17.

One reason why market research often fails to justify itself as a separate function in the organization is that its administration

A Working Outline for Commercial Research

- (A) Description of Products
 - (1) Chemical Properties
Including acidity, alkalinity, solubility, derivatives, etc.
 - (2) Physical Properties
Including specific gravity, thermal and electrical characteristics, forms, etc.
- (B) Process of Manufacture or Preparation
 - (1) Flow sheet showing steps in production of existing process.
 - (2) Flow sheet showing steps in competitive process—comparatively arranged with (1).
 - (3) Equipment Required
 - (a) Comparison of equipment for existing competitive and potential processes
 - (b) Materials of construction in existing and competitive processes, with statement of potentially more economic sources.
- (C) Raw Materials
 - (1) Sources, qualities, specifications, and relative costs of all raw materials of existing process.
 - (2) Same data as (1) for competitive process.
 - (3) Other potentially available raw materials possible of filling needs, and relative costs
 - (4) Statistical data showing range and trend of prices, production, and consumption of each raw material involved.
 - 5) Other uses of these raw materials with indication of increased use exhausting supply or increasing prices.
- (D) Production and Consumption Data
 - (1) List of domestic producers with available figures of relative position in industry.
 - (2) Domestic Production
 - (a) Statistical data over period of years showing trends
 - (b) Proportion of product consumed by the producers or marketed
 - (c) Sectional distribution of production
 - (3) Domestic Consumption
 - (a) Statistical data over period of years showing trends
 - (b) Sectional distribution of consumption.
 - (4) Foreign Production
 - Available statistics of production in foreign countries.
 - (5) Foreign Consumption
 - Available statistics of consumption in foreign countries
- (E) Imports and Exports
 - (1) Statistical data of imports by countries for period of years.
 - (2) Statistical data of exports by countries for period of years
 - (3) Tariff
 - (a) United States and foreign countries over periods of change
 - (b) Classification influencing duties of various forms or types of product
- (F) Production Costs
 - (1) Comparative estimate and statements of existing and competitive production costs—including and classifying.
 - (a) Investment costs—covering interest on invested capital, working capital, inventories of raw materials and product stages, amortization.
 - (b) Overhead, administrative and sales costs.
 - (c) Raw materials, at source
 - (d) Freight, inbound and outbound.
 - (e) Conversion costs
 - (2) Comparative costs estimates for numerous processes and locations
 - (3) Comparative cost estimate with increment correction for numerous rates of production
- (G) Prices
 - (1) Statistical data showing prices of several forms and grades over period of years with trends
 - (2) Statement of conditions influencing price changes past, present and potential future
- (H) Uses
 - (1) List of consuming industries and agencies, with quantities, grades, forms, locations, etc.
 - (2) List of consuming purposes with quantities of each as far as available.
 - (3) Characteristics of product determining its selection and use in each industry, purpose, and service
 - (4) Estimated quantities and proportions of product.
 - (a) Consumed in process industries losing its identity and irrecoverable as such
 - (b) Remarked in mixtures, under trade names or otherwise retaining identity in resold product to ultimate consumer
 - (c) Utilized in process industries permitting recovery in relatively valuable form for replacing original product.
- (I) Byproducts and Coproducts
 - (1) List and quantities of byproducts and coproducts, in relation to main product
 - (a) Byproducts in marketable form as produced
 - (b) Byproducts requiring additional processing cost for marketing
 - (c) Byproducts of doubtful status as to whether carrying credit for sale, or penalty for disposal.
 - (d) Byproducts with limited market, the excess of which restricts production of main product through impossibility of disposal or necessary credit.
 - (2) Potential profits from byproducts
 - (a) Through processes developed by research.
 - (b) Through development in consuming industries
- (J) Market survey of each by-product as outlined for main product.
- (K) Patent Situation
 - (1) List of patents bearing upon business under consideration
 - (a) Product patents
 - (b) Process patents.
 - (c) Apparatus patents.
 - (d) Use and application patents.
 - (2) Influence of Patents Upon Business
 - (a) Expired patents definitely opening essential features.
 - (b) Valid patents conveying monopoly of features to others with evaluation of importance of such features.
 - (c) Patents under adjudication suspending status of business.
 - (3) Pending Patents of Company
 - (a) Probable value of patent in business.
 - (b) Possibility of patent controversy.
 - (4) Available patents through purchase or license, with estimate of cost and evaluation.
- (L) Competitive Considerations
 - From analysis and study of foregoing data actual and potential status of competition in its various forms, phases, and relations is clarified and evaluated
 - (1) Price
 - (a) Ultimate minimum price in view of possible production cost in "F."
 - (b) Influence of prices from foreign competition.
 - (c) Reduction in price necessary to extend into other consuming fields.
 - (2) Quality and Service
 - (a) Preferential business existing and available through improvement in quality, packing, delivery, or other characteristics of present product.
 - (b) Deficiencies in present quality, character, purity, physical state, or other features of present products that may through modification extend it into other consuming lines
 - (3) Potential Product Competition
 - (a) Study of similar functional qualities of materials in all possible industries and check against properties of present product to possibility of new outlets
 - (b) Study of purpose and specifications of present consumer for present product to determine possible competition from other materials. (From data of H-3)
 - (c) Study of markets and trends of principal products consuming the material in question to determine the future outlook for such applications

FIG. 19.—From an article, *How to Apply the Principles of Commercial Research*, by Bethune G. Klugh, Vice-president in Charge of Commercial Research, Swann Chemical Company, Birmingham, Alabama. Published in *Chemical and Metallurgical Engineering*, January, 1931.

INDUSTRIAL MARKETING CHECK LIST
Controllable Policies in Economical Distribution

(When a manufacturer of a product sold to industry wishes to improve his marketing position, one or more of the following marketing elements of his business must be changed.)

- I. The Product or Service Sold.
 1. Finding new uses.
 2. Improving existing line.
 3. Discontinuing unprofitable items—simplification.
 4. Adding new lines.
 5. Packaging.
- II. The Price Policy.
 1. Price to consumer.
 2. Price or discount to distributors or agents.
 3. Credit—time payments—consignment policies.
- III. Services Rendered to Customers.
 1. Physical distribution of goods—transportation—warehouses—branch plants.
 2. Repair and replacement service and guarantee.
 3. Use of service engineers and trained operators.
 4. Correspondence and contacts with customers and prospects not elsewhere classified.
- IV. The Use of Salesmen.
 1. Selecting salesmen.
 2. Training salesmen.
 3. Directing salesmen to territories—industries—plants—people—frequency of call.
 4. Method of salesmen's compensation.
 5. Sales story and aids.
- V. The Use of Distributors.
 1. Selecting proper distributors—selling agents—mill supply houses—jobbers—dealers, etc.
 2. Allocating accounts to distributors—by products—size of plant—industry—territory.
 3. Changing distributor policies—exclusive representation—missionary salesmen—sales aids—direct mail—national cooperative advertising.
- VI. The Use of Sales Promotion.
 1. Publication advertising.
 - a. Directing it to different industries—plants—people.
 - b. Selection of magazines best suited to needs.
 - c. Developing message to be conveyed.
 - d. Size, position, and frequency of insertion.
 2. Direct mail.
 - a. Directing it to proper territories—industries—plants—people.
 - b. Form of direct mail—letters—booklets—house organ, etc.
 - c. Developing messages to be conveyed.
 3. Catalogues and directories.
 - a. Selection of method of cataloguing (consolidated—distributors catalogue—individual.)
 - b. Selection of directories.
 - c. Size of space.
 - d. Message to be conveyed.
 4. Exhibits and trade shows.
 - a. Selecting trade shows and exhibits.
 - b. Displays to be used.
 5. Silent and sound motion pictures—slides.
 - a. Selecting the type of pictorial presentation.
 - b. Developing the message to be conveyed.
 - c. Creating the "scenario."
 - d. Method of circulation.
- VII. Cooperative Effort of Industry.
 1. Developing the code of ethics in marketing.
 2. Developing program of standardization and simplification.
 3. Organizing cooperative advertising.
 4. Determining use of engineers in industry.
 5. Developing statistics of industry and research.
 6. Developing product analysis.

FIG. 20.—An outline of the problems which may necessitate market

MARKETING STUDIES NEEDED TO FIX DISTRIBUTION POLICIES

A. The Market for Your Product.

- a. Application of your product in each industry.
- b. Total number of buying units in each industry—by size groups and purchasing power.
- c. Geographical location of each industry.
- d. Freight rates.
- e. Index of consumption or use in each industry.
- f. Growth of each industry.
- g. New products made by each industry affecting the use of your product.
- h. New methods or processes in each industry affecting the use of your product.
- i. Modernization, mechanization, and obsolescence in each industry affecting the use of your product.
- j. Long-time trend of consumption of your type of product.
- k. Price trends of your type of product.
- l. Present and forecast business conditions in each industry.

B. The Buying Practices of Your Market.

- a. Who in the buyers' personnel participates in buying your product?
- b. Sources from which the product is bought—manufacturers—jobbers, etc.
- c. Types of products now used.
- d. Position of your company and competition in the market.
- e. Seasonal variations in purchase—consumption or use of your type of product.
- f. Time required for complete purchase transaction.

C. Relationships with Customers.

- a. Percentage of customers' purchases you secure.
- b. What competitors are securing balance of this business?
- c. Reasons why your customers selected your product.
- d. Reasons why customers do not buy exclusively from you.
- e. Reasons why customers patronize competitors also.
- f. Customers' opinions of your product—price—service—salesmen—distributors—literature—advertising—credit policy.
- g. Frequency of calls on customers by salesmen—distributors—service men.

D. Relationships with Prospects.

- a. Degree to which need for your product is recognized.
- b. What competitive types of products are used by your prospects?
- c. Why did prospects select these types in preference to yours?
- d. What competitive makes of your type of product are used?
- e. Reasons why your competitors' products have been selected.
- f. Familiarity of prospects with your product—its uses and advantages.
- g. Reasons why prospects decline to buy your product.
- h. Adequacy of your cultivation of prospects—by salesmen—by direct mail—by advertising.
- i. Methods and degree of cultivation by competitors—by salesmen—by direct mail—by advertising.

E. Relationships with Distributors.

- a. Number, kind and location of distributors handling your product.
- b. What share of your type of business do you get from your distributors?
- c. Reasons why your distributors choose to handle your product.
- d. Reasons why distributors do not handle your product exclusively.
- e. Reasons why they handle each of your competitors' lines also.
- f. Distributors' opinions of your product—price—discounts—service—salesmen—credit policies—literature—advertising.
- g. Sales methods of your distributors: territory covered—selection of accounts—soliciting methods, etc.
- h. Reasons why distributors not handling your product choose not to do so

F. Performance of the Sales Organization.

- a. Size of plants called on—frequency.
- b. Industry and location of plants called on.
- c. Number and character of people seen in those plants These broken down by:
d. Objections and excuses encountered. Salesmen—
e. Number of customers lost—added—net. Industry—
f. Dollar sales lost—added—net. Territory—
g. Cost per call. Plants according to size.
h. Cost per order.
i. Profitableness of sales.

is too often entrusted to men who are good researchers but poor executives. In their passion to discover new facts they overlook the problem of balancing expenditures against the value of results. In many cases they fail to appreciate the importance of the time factor. A report may be worth thousands of dollars today, but nothing tomorrow after the vital decision has been made. New men, particularly, are likely to accept too many assignments and fail to do justice to any of them. These are purely problems of management. There are certain devices which are helpful in handling them. Requests for service should be made on requisition forms, each of which is given a docket number (see Fig. 18). An immediate desk investigation should be made, using library and files. If the problem cannot be answered in this way, a plan should be prepared for securing the answer, and the estimated time and cost reported to the executive requesting the service. This disposes of a major difficulty, the requesting of investigations which involve disproportionate expense or which cannot be completed in time to be of value. If the preliminary report is approved and further work requested, the director must consider whether his budget will stand the expense. If he is a new man working without a definite budget, he may find it advisable to have the superior to whom he reports approve the project before placing it on the active docket.

The speed with which the market-research man or department can answer the average query should constantly increase. The most important agency in facilitating quick and accurate reports is a complete and well-arranged file of information on markets, customers, and competitors. This file is built up from reports previously rendered, clippings from trade and business papers, information gleaned from salesmen's reports, reports of interviews, correspondence, and a host of miscellaneous sources. Past painstaking work in collecting and filing stray items of pertinent information may permit of an immediate answer to a query which would otherwise involve several days of field work. The saving of money is important, the saving of time trebly so. It is by such efficiency that market research justifies its place in an organization.

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CHAPTER VI

INDUSTRIAL SALES ORGANIZATION

Organization Types.—A soundly conceived set of plans and a minute knowledge of current happenings serve as chart and compass to marketing. They are of no avail, however, unless they are put into effective use through proper organization. The amount of organization required in industrial marketing, as in any other phase of business activity, depends largely on the size of the concern, or perhaps more directly on the number of customers with whom contact must be maintained. A small company making a simplified line of products sold to a small list of customers in a limited area may have a sales force of perhaps half a dozen men. In such a case a single sales manager can without difficulty hold the strings of control rather closely through personal contact with his men. No elaborate structure of organization is necessary. The opposite situation exists in the case of a large company making many varied lines, and selling on a national, or even an international, scale to a large number of customers with different requirements. Here no individual by himself can adequately control the entire situation. Division of responsibility and delegation of authority is necessary. The marketing task must be organized so that each man's duties and powers are clearly defined. The organization should take such form that the marketing job can be most efficiently and economically performed. When the problem of management goes beyond the point where the direct employer-employee relationship is adequate, the organization may take one of three forms: military, functional, or line-and-staff.

Military.—In the military type of organization all authority traces directly to the executive in charge. Such an organization may take the form of a sales manager supervising a group of branch managers, each of whom supervises a group of salesmen (see Fig. 21). Essentially this is an extension of the one-man control of sales, with the interpolation of subordinate executives making possible a multiplication of the supervisory power of the

individual at the top. This simple type of control has its very definite advantages. There is no delay in formulating plans or in carrying them out; nor is there any question as to where responsibility lies. Each man in the organization reports to one superior. A high degree of discipline is attained. In small concerns, or even in large ones engaged in the simpler types of business activity, this form of organization proves very effective. As enterprises grow larger and more complex, however, this method makes very heavy demands on the capacity of the executive in charge. Adding more supervisory levels stretches the chain of authority and weakens it. Hierarchies of minor officials may

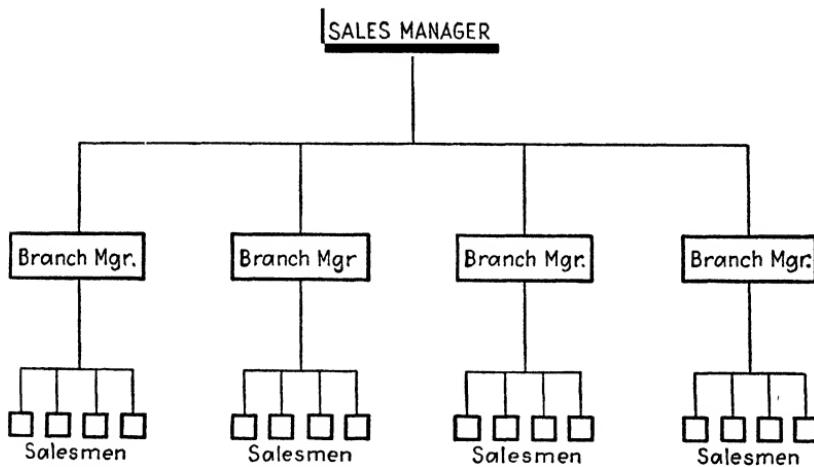


FIG. 21. A "straight-line" or "military" type of sales organization.

*grow up, thwarting the will of the man at the top. Orders go slowly from top to bottom, and may be distorted in transmission.

Functional.—The answer to this situation may be sought in functionalization or specialization, by which each of a group of executives undertakes the supervision of a particular function. Each is responsible only for his specific field of activity and has authority over subordinates only in respect to his particular function. An organization of this sort is illustrated in Fig. 22. The major advantage of this form of organization is that of increased individual proficiency through specialization. There are two important disadvantages. At the top of the organization it is somewhat difficult to coordinate the activities and responsibilities of the specialized executives. There are likely to be

overlapping and duplication, and likewise there is danger that some vital responsibility will fall between two executives and be assumed by neither. The ultimate development of functionalization is management by committee. This is commonly criticised as being slow in decision and in execution, which is a serious drawback in an era when speed is an important factor in competition. At the bottom of the organization, subordinates are frequently confused at being subject to orders from more than one superior. While the device of using functional foremen often works well in factory management, it has little place in sales management. In the factory, operations are centralized. Lines

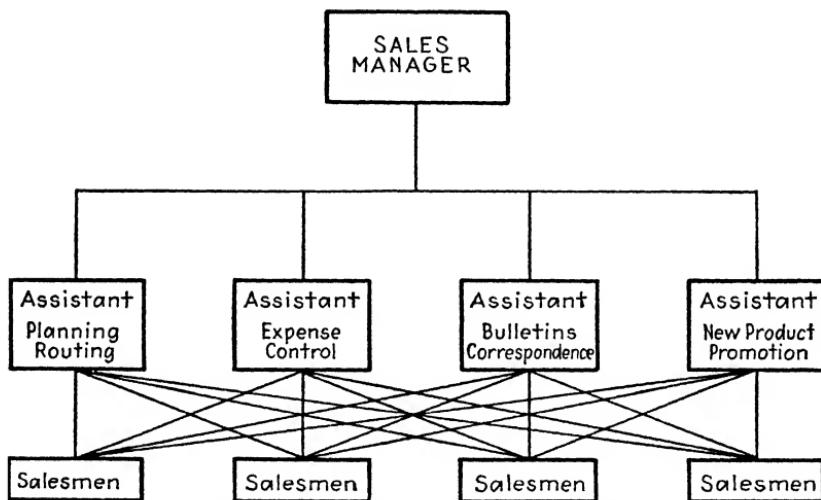


FIG. 22.—A "functional" type of sales organization.

of control are strong. Instances of confusion can be easily rectified. With the sales force, however, lines of control are more tenuous. Instructions cannot be received and put into effect so quickly. The dangers of divided responsibility, therefore, become much greater.

Line and Staff.—The line-and-staff type of organization attempts to secure the advantages of both the military and functional types and to avoid their weaknesses. Here all direct authority is transmitted from a single executive at the top, with functional specialists serving as advisers and consultants to the line officials. A typical example of this type of organization involves a sales manager supervising a group of branch managers, with a group of assistant sales managers each responsible for

formulating plans for the promotion of some specific product. The effectiveness of this method depends on the willingness of the line executives to avail themselves of the knowledge of the staff specialists. These latter individuals often have a difficult time. As specialists they study problems and make recommendations. Their value depends on the extent to which their recommendations are utilized and prove successful, yet they have no power to put them into effect. To achieve success in this kind of position a man must be able to "sell" himself and his work to his superiors and associates.

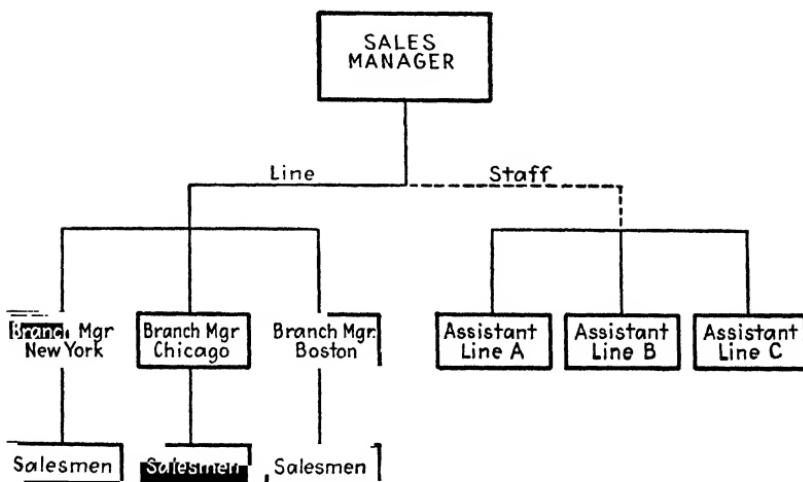


FIG. 23. A sales organization of the "line-and-staff" type.

In theory, a staff worker's recommendation is made to the line officer to whom he reports. The line officer, if he approves, orders it put into effect by his subordinates. In practice the staff worker makes himself more valuable if he can work effectively with these subordinate line executives. The director of market research in the organization pictured in Fig. 17 (see page 81) is a typical staff official. In the course of his department's work, he frequently encounters faults in district office organization or management. If he were to report these to the general sales manager for the issuance of corrective orders, he would earn the resentment of the district managers. By discussing such situations with them and permitting them to apply the remedy, he wins their cooperation, which is vital in his work. In a sense it may be said that the effective staff officer is one who

performs the duties of a functional executive without the exercise of authority.

Intermixture of Organization Types.—Most highly developed industrial sales organizations contain elements of all of these types. For example, Fig. 24 shows a fragment of the organization chart of a successful industrial sales force. The salesmen receive their orders directly from their branch managers, who in turn report directly to the sales manager, a simple and direct "line" relationship. In respect to training, however, the salesmen are subject to the orders of the director of sales training, a

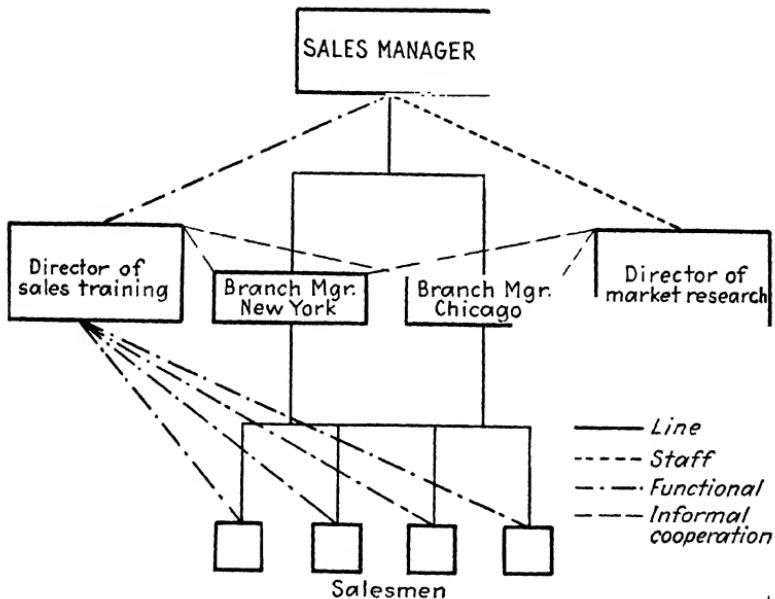


FIG. 24.—Partial organization chart of an industrial sales department showing lines of authority and relations of informal cooperation.

functional executive reporting to the sales manager. This man has no jurisdiction over any other phase of the salesmen's activities, but he may require attendance at sales-training conferences, or prescribe individual work for salesmen who need it. In theory, he may ignore the branch manager as far as matters of training are concerned. The possibility of dissension and conflict of orders which characterizes the functional type of organization is obvious here. In practical fact, the director of sales training works closely with the branch managers in an informal way. To the sales manager there also reports a

director of market research, who is purely a staff official with no authority over anyone in the organization. His success, however, is due in no small measure to his ability to make helpful suggestions to the branch managers and to their willingness to pass on pertinent items of information to him.

The Human Side of Organization.—This emphasizes the fact, which must never be forgotten, that organization is not a matter of lines on a chart but of human relationships. It is a device to coordinate most effectively the abilities of the men involved so that they work toward a common end with a minimum of friction. Clear delineation of authority and responsibility are of course imperative but the sales department which hews to the line of the organization chart is seldom outstanding. The vitality of any sales division is largely a matter of the extent to which informal voluntary cooperation between individuals is the rule. To effect this cooperation is the most important single job of the sales manager. He may achieve it through selecting the right type of men, through following sound principles in dividing up responsibility and authority, and, above all, by the force of his own inspiration and example.

CENTRALIZATION VS. DECENTRALIZATION

One of the fundamental problems which arises when a sales organization grows beyond the capacity of one man to supervise is whether to build up a centralized control from the home office or to decentralize geographically. Shall all operations be directed from headquarters or shall branch offices be set up? It is possible to operate physically through branches, yet to retain a strongly centralized control over all activities. How far shall authority be delegated to subordinate executives in the field?

Physical Decentralization.—When a company seeks sales over a wide area, serving many customers who must be visited frequently, the problem of maintaining adequate supervision of salesmen from the home office becomes acute. It is not feasible to require a salesman operating on the Pacific Coast, for instance, to report periodically to a home office in New York or Chicago. Neither is it feasible for a sales manager or his assistant to keep in close touch by visiting each man in a large and widely scattered sales force. Supervision by mail, telephone, and telegraph is seldom adequate. It cannot restore to productiveness the salesman who is discouraged because of a long period of effort

with no tangible results or because of home worries. It cannot show the man who is puzzled by a difficult customer how to win the account. When distances are great and customers many, therefore, the establishment of branch offices as supervisory centers is likely to serve the ends of both economy and efficiency. It must be recognized, however, that the airplane and faster train schedules are extending the areas over which effective control can be maintained from headquarters.

Sometimes a branch organization is required by the nature of the product or of the seller's distribution policy. A manufacturer of industrial belting, for instance, may be obliged to maintain stocks at various central points so that his customers may secure immediate delivery of replacements. A local representative must be kept on the job. It is natural to combine with the responsibility of looking after the inventory that of exercising a certain measure of field supervision over the local sales force.

Number of Branches.—The proper number and location of sales branches depends on many factors. If established for better supervision the major criterion is the number of men which can be effectively directed by one individual. This in turn depends largely on the nature of the supervisory task. If thorough coverage of the territory is sought, fewer men can be handled than if it is merely necessary to "hit the high spots." If special duties are required of the salesmen, such as good-will calls, reselling, and so forth, a district manager can handle fewer men than if routine order taking is the only objective. The greater the distances involved, in general, the smaller the number of men which can be effectively handled. The characteristics of the salesmen also play a part. Able and intelligent men may require only desultory supervision, while low-grade, inexperienced men may require so much personal attention that only a few can be handled.

Danger of Overexpanding Branch Organization.—In the decade prior to 1929 there was a strong tendency for producers of industrial goods to seek direct contact with their customers and to take over most of the functions formerly handled by jobbers. Coupled with this was a general demand for quicker deliveries and a growing reluctance of middlemen to carry large stocks. Consequently many manufacturers found themselves maintaining sectional warehouse stocks which served quite naturally as nuclei for branch sales organizations. Much of this decentralization, as

well as a considerable number of ventures into direct selling, probably had no true economic justification. It did in most cases secure additional sales volume when business was active, but it often left a structure which was overextended and unable to maintain itself in a period of curtailed volume. This is an insidious danger. Unless a continuous and detailed check on selling costs is maintained, branches which are unprofitable are likely to be continued because their losses do not appear openly, but merely serve to reduce the profits piled up by the other branches. One company continued for several years a group of branch offices with no realization of their true cost. An analysis finally disclosed the following situation:

Office	Direct sales expense	Gross margin produced
New York	\$165,000	\$375,000
Chicago	95,000	385,000
Boston	93,000	300,000
Cincinnati	60,000	41,000
St. Louis	55,000	22,000
Atlanta	40,000	27,000
San Francisco	39,000	43,000
Dallas	38,000	24,000
Minneapolis	33,000	20,000

As a result, certain branches were abandoned. Others were continued, in spite of the losses they produced, because it was deemed necessary to maintain direct representation in the markets they served, and it was fully as cheap to do so through a local office as through supervision from a distance. There are, of course, many reasons which justify maintaining branches which do not directly pay their own way. They may secure volume, available in no other way, which is necessary to keep the plant operating at an economic level. They may represent attempts to anticipate future possibilities in their territories. Upon the advocates of opening a new branch, however, should be placed the burden of proving that it will, in the long run, add directly or indirectly to the profits of the enterprise. It is harder to abandon an unprofitable branch than to refrain from opening it. Company prestige may be damaged. Local pride may be

injured, causing customers to turn to competitors. There is a bad psychological reaction in an organization which is forced to retreat from a position once taken.

Decentralization of Authority.—There are two distinct points of view regarding branch sales offices. According to one, the branch represents merely the placing in the field of a portion of the central sales department. The branch manager acts as a field agent to transmit orders from the sales manager at headquarters to the men in the field. He may act to a limited extent as a "sales foreman," but he is circumscribed by a mass of detailed instructions. He has no authority to make decisions but must refer matters of even minor importance to headquarters. He must make detailed reports covering all of the branch activities. This system has the advantage of requiring only men of little ability, easily secured, and inexpensive. It often proves effective where the problems encountered are uniform in all territories, where few cases requiring immediate decisive action arise, and where the job of sales control is essentially routine in nature. Its concomitants are likely to be red tape, delay, and inflexibility.

The other point of view regards the sales branch as essentially a separate enterprise. Wide authority is delegated to the branch manager and he is held responsible only for his general results, usually measured in terms of volume and profits. By this arrangement, headquarters sales expense and executive burden are reduced. Effectiveness can be attained, however, only by securing branch managers of superior ability, who must be correspondingly compensated. Such men are not easy to find. There is the danger that operations in the various territories will deviate too far from the central management's desires. A dishonest or incompetent manager may wreak havoc in his company's position in his territory. Neither managers nor men are easily interchanged. Replacement of managers who retire, resign, or are dismissed is likely to involve radical changes in methods, with consequent disturbance of sales in the territory.

It is difficult to generalize as to the extent to which sales management should be decentralized. Every company's problem is different, and can only be well solved by considering the circumstances surrounding the individual case. However, one easily finds cases of obvious inconsistency. Where the threads of control are closely held at headquarters, there is little sense in

trying to attract branch managers capable of running their own territories independently. Conversely, it is clearly futile to place any considerable responsibility upon an existing group of branch executives of mediocre ability. Provided that man power is kept consistent with the job to be done, however, it is generally advisable to decentralize those functions which present problems essentially local in nature; to centralize those which are uniform in all sales areas.

Influence of Mergers.—A force working in the direction of greater central control during the period 1925-1930 was the growth of large industrial mergers. As a rule the managements of these large combines have permitted much purchasing to be continued locally, but approval of important purchases by the central office has usually been required. When prior to a merger all the keymen in a sale were available locally, after the merger it has often been necessary to contact individuals in two or more sales territories with regard to a single order. When many such situations exist, as in the case of manufacturers selling to electric power companies, a type of organization which permits of strong central control is obviously required.

Decentralization of Functions.—It sometimes proves advisable to set up in the various sales offices certain auxiliary marketing functions. Most important of these are credit, billing and collection, and accounting. A company selling office equipment found that by requiring all credit applications to be passed upon by the credit department at headquarters it was seriously handicapping its sales. New customers who wished immediate delivery bought from competitors. Under pressure for volume, branch managers soon began making deliveries without waiting for approval of credit. This resulted in an increase in slow and bad accounts. The solution adopted was to give the branch managers authority to pass upon credits and to hold them responsible for collections. In this connection it should be noted that the number of transactions and the size of the average sale have a pronounced effect on the speed with which a central credit department can pass on risks. Where there are a large number of special arrangements with customers, or where frequent adjustments must be made, it may be advisable to have billing done from the branch office. If a mass of small transactions must be handled, an accountant may be attached to the branch office staff. There seems to be a tendency when this is done,

however, to make the branch accountant responsible to the head of the central accounting department rather than to the branch manager.

Segregation by Products.—Another common type of decentralization is frequently found in companies which sell a rather wide variety of products. Here the sales organization is frequently segregated by products, each line or group of products having its separate personnel. The chief advantage of this plan is that it permits the bringing of more active and intelligent sales promotion activity behind each product. Salesmen are invariably more effective in presenting a simpler proposition. When the line is short they can be better trained and more closely supervised. Segregation of sales force by products is ordinarily effective only when the various product groups are sold to different customers. The spectacle of half a dozen salesmen from the same company calling on a single purchasing agent never creates a favorable impression. Occasionally, however, it may be justifiable to segregate the sales force by products even though they are sold to the same customers, when different individuals in the buying concerns are responsible for the purchasing decision.

Segregated Branch Organizations.—Companies serving a wide area with a diversified line of products frequently face an interesting problem of organization when there is a combination of geographic decentralization with segregation by product lines. The usual procedure in such cases is to establish a strictly line relationship between the branch manager and the general sales manager, with the man in charge of specific product sales acting in a staff capacity. In cases of this sort it is necessary that the lines of authority be established in clear-cut form. It is also quite essential to develop a high degree of cooperative spirit so that the staff relationships between product manager and branch manager may prove effective aids rather than sources of friction. Probably the most modern solution to this problem is to segregate the functions of sales operating from those of sales planning, or "merchandising"; and to decentralize the operating functions geographically with line control, keeping the planning functions at the home office, and subject to the control of the general sales manager, but with a staff official in charge of planning for each product. Figure 25 shows a "before and after" picture of an organization in which this scheme was adopted. Under the old setup, the branch managers were under constant pressure from

the product sales managers, each of whom was anxious to get the largest possible amount of sales attention for his product. At times the product managers issued instructions direct to the

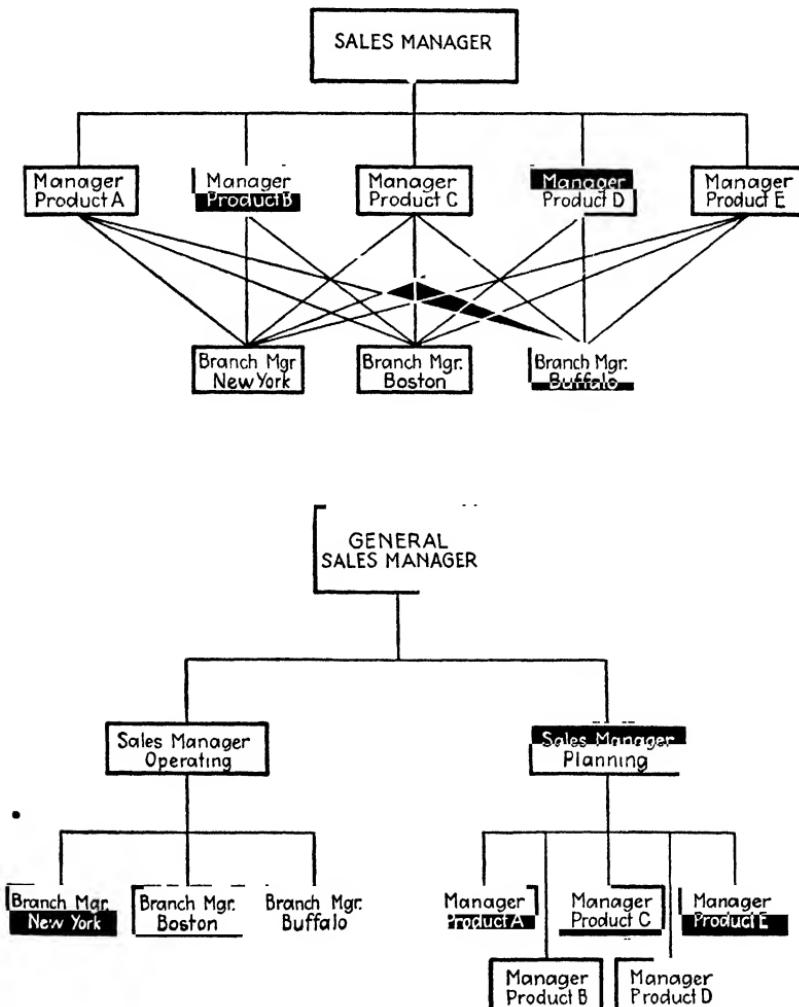


FIG. 25.—The upper chart reveals the conflict of authority in dealing with the branch managers. The lower chart shows how the difficulty was removed.

salesmen, who did not specialize by products. This resulted in a high degree of confusion. The general sales manager was harassed by the need of settling disputes which arose from the bitter rivalry among the product managers. No time was left

him for constructive planning. Finally conditions became so impossible that a sweeping change was made. Two new executives were brought in. These were not essential to the change in the organization form but were employed because of the general sales manager's desire to free himself from the necessity of constant attention to current problems. After a short and somewhat disturbed period of transition, the new form of organization proved highly successful. Morale of the sales force was improved. Sales effort devoted to the various products was uniform, rather than spasmodic. The product managers, stripped of their authority, were forced to rely on improving their products and developing more effective ways to sell them, rather than upon bluster. The natural result was larger and more stable sales volume.

Segregation by Customer Types.—Many concerns selling industrial goods have found it advisable to segregate their sales forces on the basis of the type of customer served. Particularly when highly technical considerations are involved it may be of decided help to have individual salesmen specialize in the application of the product to a single industry. Such a sales force setup is frequently found when a product is sold to a series of vertical markets, a situation which exists in the case of certain fabricating and process materials. This type of segregation has the advantage of permitting a highly specialized technical sales approach. It can only be used economically, however, in territories where prospects are highly concentrated.

Specialization by Customer Size.—Another type of specialization within the sales force is frequently found in the division of prospects or of duties between senior and junior salesmen, whereby seniors handle large and important customers and juniors or trainees handle smaller customers and prospects. Or in some cases where service calls are required the senior takes care of the selling calls, leaving the more routine service visits to the juniors. This type of specialization ordinarily does not complicate the organization structure, as the junior salesmen are usually attached to individual seniors as their assistants. Where this subdivision of work is used as a part of a training program, however, some control of the relations between the seniors and juniors must be provided for.

Organizing the Engineering Sales Staff.—Engineering service plays a very important part in much industrial selling, and, when

it is used, its part in the organization must be determined. Where a great deal of technical skill is not required, it may be sufficient to use salesmen with a moderate degree of technical education. Frequently, however, a degree of engineering skill is called for which is not compatible with a high degree of sales ability. In such cases it is usual to provide one or more highly trained engineers, controlled directly from the home office, and held in reserve to back up any salesman who gets beyond his depth in technical problems.

Summary.—Development of the proper type of sales organization depends largely on the circumstances of the individual case. The following generalities, however, will hold true with only a few exceptions.

1. When both industrial and consumer markets are being served, it is almost always advantageous to segregate the sales activities directed at each market.
2. Where the line is one which is subject to change in design or composition from time to time it is usually advisable to segregate the functions of sales planning (merchandising) and sales operating.
3. If a great deal of sales promotion activity is carried on with a wide line of products, it is usually advisable to segregate the sales force by products or product groups.
4. When a very high degree of technical skill is required in selling a product used in several industries of different characteristics, segregation of the sales force by industry is usually effective, if economically feasible.
5. Where a great deal of engineering service is required prior to the sale, a centralized sales organization is usually more effective.
6. Where repair service of a technical nature must be furnished after the sale, geographic decentralization of the sales force is likely to prove more effective.
7. When sales are made through jobbers or functional middlemen, the concern's own sales organization is usually small and centrally administered.

Need for Flexibility.—Most faults in sales organization structures are not due to initial mistakes, but to the failure to modify the organization to meet changing conditions. When a new product is added or a new market entered it seems at the moment to be the easiest thing to carry on with the existing type of organization. Yet a series of such changes will almost invariably call for a revision of the organization plan if maximum efficiency is to be attained. An organization chart is valuable as picturing the situation at a given time, but it should not be permitted to become a guide to future policies.

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CHAPTER VII

SELECTION AND TRAINING OF INDUSTRIAL SALESMEN

The Cost of Hit-or-miss Selection.—There are two possible methods of building a sales force. One is to hire every individual who comes and asks for a job, send him out into the field, preferably on a commission basis, and leave him to sink or swim. By the process of natural selection the “failures” are eliminated, and the survivors, who have succeeded against heavy odds, are retained. This process necessarily involves a high turnover of salesmen, expensive to the employer and frequently disastrous to the individual who goes through the mill. In selling industrial goods a salesman must be given a certain amount of training if he is to have any hope of getting a hearing. The cost per man of this training, multiplied by the number of candidates who fail to succeed, constitutes a net out-of-pocket loss to the company which follows this plan. In addition there are various intangible losses such as wasted supervisory time and possible resentment by customers who have had incompetent and untrained men sent to serve them.

Job Analysis.—The other method is to select salesmen as scientifically as possible, rejecting those who obviously are not qualified to succeed. The type of man required to do a certain sales job depends on the nature of the job. Consequently the first step in selecting men for an industrial sales force is to make an analysis of the job and to write a set of specifications which lists the qualities required. A highly technical product which must be explained to the purchaser's engineers obviously requires a man with considerable technical education. Yet if the product, although complicated in construction, is foolproof in operation, a man who can talk to the shop foreman in terms of the product's use may do a better selling job. In other words, who are the key-men in purchasing the product? What are the motives which will influence them to buy? Knowing who are the keymen, it is important to select sales representatives who can reach them, will be personally acceptable, and will have the necessary training and mental equipment to deal with them. Whether it is necessary to seek only men with experience in a particular line is

dependent on whether the company has facilities and time for training. The essential requirements should be set down clearly and be furnished to the officials in charge of hiring sales material and to all persons asked to recommend candidates.

A Study of Past Results.—The characteristics which make for success in a particular sales job may be determined by a scientific study of men who have been successful as compared with those who have failed. This method yields significant results only in cases where data on a considerable number of salesmen are available. This is not usually the case with the average concern serving the industrial market. However, the underlying principles of the method may be of value in specific cases. An outstanding piece of work along this line, although in a different field, has been done by the Phoenix Mutual Life Insurance Company. Various factors, such as age, schooling, experience, etc., obtained from the personal history records submitted by applicants employed were correlated with success in selling life insurance as measured by average volume per month. For instance, taking 100 salesmen in each age group, the records showed the following proportions of failures and successes.

Ages	Failures	Successes
23 and under . . .	51	49
24 to 32 . . .	42	58
33 to 38. . . .	36	64
39 to 44. . . .	47	53
45 and over . . .	50	50

Other factors were similarly determined, and for each applicant a composite score was computed as shown in the table on page 105.

The "critical score," or the standard for selecting future applicants, was set at 655. By applying this standard to the records of the company's successful salesmen, it was found that 70 per cent would have been hired; of those who had proved failures, 68 per cent would have been eliminated.

Personnel Records.—The average industrial sales organization lacks sufficient case-history data to develop such refined methods. The principle may be applied, however, in any sales group of medium size. It is generally used in an informal way. If a sales manager has poor luck with two or three men hired from competitive organizations he is likely to turn down applicants

Personal history record		Score
Age.....	21	49
Dependents.....	0	49
Marital state.....	Single	49
Schooling.....	High school graduate	68
Years out of school	3	60
Selling experience	0	66
Membership in organizations . .	4	62
Offices held in organizations . .	0	59
Home investments	Boards	52
Number of investments	2	54
Insurance carried.....	\$1,000	59
Composite score . . . . .	...	627

who have worked for competitors. The trouble with this extremely empirical method of selection is that a sales manager may convince himself that men under six feet tall make poor salesmen or that no man weighing over 190 can fail to be a success. The keeping of complete and detailed personnel records will in the course of time furnish a sound basis for checking personal impressions as to the characteristics requisite to success.

Sources of Industrial Sales Material.—An important factor in the selection of salesmen is the choice of sources from which to recruit them. The sales manager may seek salesmen from:

- 1. His own organization.
- 2. Competitors.
- 3. Firms in other lines of business.
- 4. Educational institutions.
- 5. Men out of work.

Promotion within the Organization.—Selection of sales force material from within the organization ought to guarantee a higher proportion of successful choices. The applicants have been subject to observation and judgment over a considerable period. They have presumably become accustomed to and accepted the policies of the company. They have acquired a certain amount of experience and knowledge of the business which would have to be taught to outsiders. Further, it is highly desirable, when possible, to fill all vacancies by promotion because of the effect on the morale of the organization. No single policy affords a greater incentive to loyalty and earnest effort or is more potent in attracting employees of high calibre.

This policy should never be made a fetish, however. It is foolish to spoil a good mechanic or stock clerk by making him into a poor salesman. In an organization which periodically expands its sales force, it is often helpful to make some definite attempt to select and observe potential salesman material. Opportunities may be devised for making special assignments which test the essential qualities of such men. If they fail to make good in these tests, they are not spoiled for their regular jobs.

Competitors' Salesmen.—Hiring men from competitors results in getting a considerable degree of experience and knowledge of the line. Sometimes, in fields where personal friendship constitutes a strong buying motive, a salesman hired away from a competitor may bring with him a considerable clientele of personal customers. Such men, however, often do not fit well into a different organization, and may constitute disruptive influences. Hiring men from competitors is likely to be an expensive way to build a sales force, as salaries must be maintained above the level existing in the trade. There is also a question of ethics involved which each company must solve for itself.

Salesmen in Other Lines.—By seeking men who have had experience in selling for firms in other lines of business it is possible to pick men who have demonstrated that they actually possess ability to sell. The training problem then is merely one of instructing them in the characteristics of the line and in the methods and policies of the house. Thus a considerably shorter period of training is required than is the case with men who have had no previous sales experience. By selecting men from the fields where the average remuneration is lower it is not necessary to expand the pay roll to attract them.

Customers' Organizations.—Another fruitful source of salesmen for concerns selling to industry is found among men who have had considerable experience in the use of the product. A minor production executive is often well equipped to present the advantages of a particular system of production control with which he has worked. An office manager may make a good salesman for a producer of office machinery or equipment. Such men speak the language of the user and can intelligently discuss his problems. The training required here is primarily in the art of salesmanship rather than in the applications of the product.

Educational Institutions.—There is an increasing tendency on the part of manufacturers selling to the industrial market to

recruit their sales forces from graduates of educational institutions, particularly engineering and business schools of collegiate rank. Such men have a training in fundamentals which simplifies the job of teaching them the characteristics of the line. Moreover, they are by reason of their immediate past environment usually more capable of assimilating instruction readily. Although they frequently lack actual industrial experience, neither have they acquired habits of thought and action which must be corrected. Although requiring a longer period of training than more mature individuals, they can usually be obtained at lower salary figures, so that the total cost to the end of the training period may be no greater than with men secured in other ways. Because of their youth, a longer period of usefulness can be anticipated. The chief drawback of the college man as a source of sales force material is his reputed excessive ambition and his desire to progress faster than his ability or circumstances in the organization justify. This is in part a sound criticism, but in most cases, especially in the marketing field, the defect arises from the inability of the managements to harness and utilize the full energies of the young men they hire.

Unemployed.—In times of active business the unemployed group is seldom a good source for material of more than mediocre ability. In times of slack business, however, when other organizations are forced to curtail their operations, or are perhaps liquidating, it is often possible to secure men with ability of a high order and both general and specific training, without the need of bidding against competitors. Some sales managers believe that men secured at such times tend to be more loyal than men employed under more normal circumstances. Certainly it is a wise move to utilize such periods for strengthening a sales organization by pruning away inefficient men and replacing them with individuals of higher calibre. It is obviously foolish to hire a man who is clearly too good for the job, but is available because of temporary inability to secure a job commensurate with his capacity. The few organizations which have tried this find that such men invariably leave just when they are most needed.

Methods of Securing Applicants.—When expanding business or vacancies necessitate additions to the sales force, applicants may be obtained from the sources listed above in various ways.

1. Unsolicited applications.
2. Recommendations by members of the organization.
3. Solicited recommendations from outsiders.
4. Placement bureaus.
5. Advertising.

Every organization of any repute is constantly receiving applications for positions on its sales staff. It is common practice to have applicants fill out a standardized application blank, examination of which automatically disqualifies many. When an applicant seems to show promise, and a job exists, or seems likely to exist in the near future, a personal interview is usually arranged. The applicant who has some real reason for seeking out a particular company often makes a highly valuable salesman. The real problem is to select such individuals from those whose only interest is to get a job, or a higher salary.

Recommendations of Present Salesmen.—It helps to maintain an esprit de corps in an organization if new men are selected, as far as possible, from recommendations made by men already in the organization. They know intimately the requirements for success, and are likely to take an active interest in cooperating in the training of their nominees. If there is a policy of not employing relatives of present employees, recommendations from the present sales force constitute an exceptionally good means of getting in touch with potential salesmen.

Recommendations from Outsiders.—When difficulty is experienced in finding the right man for a job, inquiries are often directed to outside sources which are likely to be in touch with the sort of man desired. For instance, if a graduate engineer is required for technical sales work, the deans of various engineering schools may be asked to recommend candidates. Faculty members with industrial connections frequently select students of exceptional promise for the concerns with which they are associated. Where a sales job involves considerable financial responsibility, bankers acquainted with the industry in question may be asked for recommendations.

Agencies.—Placement bureaus, particularly those which specialize in executive material, may have on their lists not only men out of work, but also men who feel that they have reached their limit in their present connections, or who for personal reasons desire to change their location; yet who are unwilling to jeopardize their present employment by widespread solicitation. Some of

these agencies have served employer-clients extremely well. Others seem to follow a policy of sending any applicant who is at hand regardless of his qualifications for the job in question. Besides the private agencies, universities, and technical institutions often maintain placement bureaus which act as intermediaries between their graduates and prospective employers. The best of these maintain detailed records of every graduate and can usually recommend men of almost any required characteristics, training, and experience who are either temporarily unemployed or who can be attracted by larger opportunities.

REPRESENTATIVE WANTED

Selling Cutting Tools

Sales representative wanted for Illinois and Indiana. Must have experience. Wide acquaintance and entrees. Opportunity for a large return for high-class man. Best of references required. RW-712, American Machinist, 520 No. Michigan Ave., Chicago, Ill.

WANTED

SALES EXECUTIVE

Large import and manufacturing concern, having a national sales organization, desires the services of an experienced sales executive to do sales promotion and application work for department handling tapioca, sago flours and similar products. Previous experience essential. Reply giving personal information, experience, remuneration desired.

P-298, Textile World
330 West 42d Street, New York City

FIG. 26.—Typical advertisements seeking men for industrial sales work.

Advertising.—Where other sources fail, advertising will often produce applicants of the right type. The particular type of man sought may be employed and contented, and therefore available as an applicant only by interesting him in the greater possibilities of a new job. Advertising is often the only way to bring such men to light. It is necessary, however, to be as careful in the selection of media and the writing of copy for this purpose as for the purpose of selling merchandise. What is desired is not to get a stream of applicants unsuited to the job, but to appeal exclusively to the type of man desired.

Records of Personnel Sources.—Where an organization takes on an appreciable number of salesmen over a period of years it is

FOXBORO Application for Sales Position The Foxboro Co.	
Foxboro, Mass. _____ 19____	
Name in full. _____	
Present address. _____ City. _____ State. _____	
Permanent address. _____ Telephone. _____	
City. _____ State. _____ How long have you lived there? _____	
Date of birth. _____ Place of birth. _____ Birthplace of father. _____	
Nationality or lineage (English, Scotch, Irish, Hebrew, etc.) _____	
PHYSICAL RECORD	GENERAL INFORMATION
Age. _____	Single, married, divorced, widower or separated? _____
Height. _____	If single, are you engaged to be married? _____ When? _____
Weight. _____	How long married? _____ How long separated? _____
Color of skin. _____	Children? _____ Other dependents _____
Color of eyes. _____	Do you live with parents? _____ Board? _____ Rent or own home? _____
Color of hair. _____	What rent do you pay? _____
Any defect in. _____ Speech. _____	Do you own real estate? _____ Value \$ _____ Incumbrance \$ _____
Hearing. _____	Do you own stocks or bonds? _____ Value \$ _____ Incumbrance \$ _____
Sight. _____	Do you own a car? _____ Make? _____
Feet. _____	Do you carry liability insurance? _____ Amount? _____
Other. _____	Have you any loans or debts past due? _____ Particulars _____
Have you taken recent physical examination? _____	Have you any other income besides what you will receive from us? _____
For what purpose? _____	What insurance do you carry?—Life \$ _____ Health \$ _____ Accident \$ _____
Did you pass? _____	Have you ever been employed by us before? _____ In what capacity? _____
How much time have you lost through illness in past two years? _____	What are your church affiliations, if any? _____
What is present condition of your health? _____	Name relatives in our employ, if any. _____
Are you willing to take physical examination? _____	Name personal acquaintances in our employ. _____
Dartnell Standard Form—S-16—All Rights Reserved—1931	

FIG. 27.—An application form used to select candidates for industrial sales positions with the Foxboro Company. (Copyrighted by the Dartnell Corporation. Used by permission.)

decidedly worth while to keep a record of the results produced by each source of applicants as a guide to future policy.

The Screening Process.—Applicants from whatever source are usually screened by examination of the application blank, which

eliminates those obviously not qualified; then by personal interview, using either the opinion of a single individual or the composite opinion of a group. In some cases tests of one sort

General Experience and Education

Name of grammar school _____ Year graduated _____

Name of high school _____ Year graduated _____

Name of college _____ Year graduated _____

Name of night school _____ Course taken _____

Special study courses _____

At what age did you leave school and start to work? _____

Did you earn all or any part of your college expenses? _____

RECORDED FOR BUSINESS INTELLIGENCE

Are you an American citizen? _____ Were you ever in Army or Navy? _____

To what military organizations, fraternal lodges, or similar organizations do you belong? _____

What is your "hobby" or favorite recreation?

FIG. 27.—(Continued.)

or another are used, usually subsequent to the interview. Sometimes a series of interviews is arranged on successive days. This tends to eliminate the man who habitually "puts his best foot forward" but who does not measure up to the initial impression he creates. Those companies which have given most attention

to the matter of selecting salesmen have found that it is helpful to have an applicant interview two or more executives in order to eliminate the personal equation. Where this is done, it may be

Particulars of Selling Experience

Are you at present employed? _____

Name of last or present employer. _____

Reasons for leaving _____

Does last employer claim any unpaid balance against you? _____

What territory did you cover? _____

In what territories have you had more than six months' experience? _____

With what territories are you most familiar? _____

What territory do you prefer? _____

What classes of trade have you sold? _____

How many concerns have you worked for in past three years? _____

What experience have you had in our line? _____

Sales for past year _____

What compensation do you expect, and in what form? _____

CHARACTER REFERENCES

Do not refer to mere acquaintances, previous employers or relatives. Refer to people who know you well, either personally or in business.

NAME	OCCUPATION	ADDRESS
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____

FIG. 27.—(Continued.)

helpful to have each interviewer record his impression of the applicant on a standardized rating sheet. The rating sheet may also be used as a means of reducing opinions of individuals outside the organization to a common denominator. Figure 28

illustrates a rating sheet used at the Massachusetts Institute of Technology to evaluate the qualities of graduating students. As time goes on, the prognostications of interviewers can be

FIG. 27. -- (Continued.)

checked against the records of salesmen employed. The relative ability of executives to judge men can thus be measured, and those with poor judgment relieved from the task of interviewing applicants. A further screen is introduced by some companies

in requiring men to go out on the road to demonstrate sales ability before a training period; or in sending them out as

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FIG. 28.—A rating sheet used to collect impressions of various individuals about applicants for industrial positions. Such rating sheets are valuable in correlating results of multiple interviews.

assistants to men in the field to get an idea of their reactions under pressure.

Training New Salesmen.—After he has passed through the series of screens the new sales candidate is usually given a course

of training which varies in complexity depending on the nature of the goods he is to sell and the policies of the company employing him. With the small company the training will usually be confined to a period at the factory to learn the technical aspects of the product, a period in the sales office to receive instructions from the sales manager, and perhaps a period on the road observing the technique of some successful salesmen. A company with a large sales force, with constant additions and replacements, usually functionalizes the training process and maintains a set course of instruction for new sales recruits. Fundamentally such courses comprise the factors stressed in smaller concerns; namely, factory training, office training, and road training.

Factory Training.—Technical training in the factory has been much in fashion for embryo industrial salesmen. It seems likely that this type of training has been overdone in some cases, where a year or two in the factory is required before a man is sent out to sell. Obviously a salesman, if he is to prove effective with industrial buyers, must be well informed as to the characteristics of his product and its method of manufacture; but it is often insufficiently realized that the buyer's interest in these points is confined to their effect on the utility of the product in relation to his particular needs. It is common to find in industrial sales work men who have excellent technical backgrounds but whose selling effectiveness is rather low. In a majority of these cases the difficulty is too great an interest in the intrinsic merits of the product, and too little interest in the adaptation of the product to the needs of the prospect. That this is not necessarily an inherent disadvantage in the use of technically trained salesmen is evidenced by the success attained with this type of sales force when trained to meet buyers' needs.

Training in the "Customer's Viewpoint."—There is need for introducing into the typical sales training program a thorough study of buying motives and influencing factors as they relate to the product in question. The factory training should be fitted to this part of the program. Where a concern is large enough to support a trained director of sales education, this is easily worked out. Where new salesmen are inducted into the organization at infrequent intervals, this responsibility must be taken over by the sales manager or an assistant, or by one of the field men. Many concerns find it advisable to select one or more salesmen who have demonstrated particular skill in educating

new men to take care of this part of the training program. This gives the advantages of functionalizing the training job without incurring the expense of maintaining a permanent organization.

In the sale of industrial machinery and equipment, new salesmen are frequently inducted through the service organization. A period of factory training, followed by a period spent in caring for repairs and adjustments in customers' plants, or in installation and demonstration work, affords an excellent background for an understanding of the customer's problems.

The "Difficulty Analysis."—An effective aid in developing a sales training program is the "difficulty analysis" developed by R. C. Hay. By interviewing a number of experienced salesmen certain difficulties characteristic of the particular job reveal themselves. Ways to overcome these may be devised and tried out, and, if successful, incorporated into the training plan. This is essentially the application of the scientific method to the problem.

Training Older Salesmen.—Training new men is only half of the educational program which should be carried on. The training process should be continuous during the salesman's entire period of employment. It is often a difficult matter, however, to convince experienced members of a sales force that they need training. This is partly a matter of personal pride, and partly a reluctance to undertake extra work for which there is no direct recompense and the value of which is not recognized.

It is usually wise, in training senior salesmen, to avoid the appearance of a formal "course." A part of any scientific plan for running a sales organization should embrace the gathering of sales ideas and methods from the individual salesmen and their dissemination among other members of the group. This activity may be carried on informally by letters or bulletins from headquarters, or by periodic visits of the sales manager or his assistants to the field men, or, where there is a branch office system, by regular conference periods. The Saturday morning meeting conducted by the branch manager—quite a common institution—can be made an excellent training medium if care is taken to maintain a spirit of seriousness and still avoid the classroom attitude.

Development of Training Material.—The development of material for training senior salesmen is a function which should be undertaken by the sales manager himself or by an assistant who

regularly devotes all or part of his time to this purpose, and who is thoroughly familiar with the nature and difficulties of the salesman's job. The "difficulty analysis" mentioned above affords an excellent means of developing the right type of material. Care must be taken not to overwork the "inspirational" type of material so frequently found in "pep talks" and sales managers' letters. The type of man required to sell industrial goods usually reacts poorly to such stimuli. Definite, concrete information as to applications of the product, analyses of specific transactions showing how effective appeals were made to various buying motives, and instances of use of the product by large concerns which by their selection add prestige to the product are always highly acceptable.

Field Training.—Salesman training is an educational process, and it is as true in this field as in academic surroundings that the most effective instruction is that which deals directly with the individual. In man-to-man conference between sales manager and salesman the personal qualities of the individual which make for success or failure can be frankly discussed, and real help can be given in the development of a sound selling technique. These conferences are valuable when held in the office but their greatest value is in the field. There is some evidence that the increasing pressure which is holding the average industrial sales manager closer to his desk or restricting his field activities to negotiations with important buyers is leading to neglect of this all-important function of personalized instruction. Where the sales manager himself cannot undertake this job, it is highly advisable to put it in charge of a mature and experienced assistant.

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CHAPTER VIII

CONTROL OF THE INDUSTRIAL SALES FORCE

The Job of Sales Control.—The primary duty of the sales manager is so to direct and control his organization that it produces orders which in both quantity and quality make for maximum profit to the company. A sound plan of sales control obviously involves the following points:

1. Definition of objectives and policies.
2. Proper apportionment of effort.
3. Adequate instructions to guide salesmen.
4. Reports of activity from salesmen.
5. Measurement of salesmen's efforts against standards of performance.
6. Suitable rewards and penalties.

With the small organization, the sales manager will usually control all of these activities from headquarters. In large organizations with many branches, some of them are delegated to the field managers. The degree of central control will vary from one company to another. As a rule the home office will set the objectives, define in a general way the methods to be used in planning and checking salesmen's activities, and standardize the methods of measurement of results and of compensation. Within the limits thus set, the branch manager will issue detailed instructions to his salesmen and maintain his own check on their performance.

Objectives.—Ordinarily the objective for the sales force has been set in terms of dollar volume of sales. In recent years there has been a decided tendency to set a profit objective as well as a volume objective. In periods of fluctuating price levels it may be advisable to set up objectives in terms of units rather than of dollar volume. Where a concern makes several different products it is usual to set up a separate sales objective for each. These goals are commonly set for the sales department by the major administrative officials, and constitute a basis for the company's budget when that device is used. Ordinarily the sales manager has a voice in the determination of the objectives which

are set for his organization, but the volume requirements for profitable production also constitute an important factor. With the growing tendency to set up systems of budgetary control, the sales manager to an increasing degree finds his objectives in terms of both volume and profit set before him, sometimes in very complete and definite detail (see Chapter IV, pages 62-67).

Planning.—Given his end-objective, it is for the sales manager then to determine how he proposes to attain it. Certain matters of sales policy may be involved. He may decide to operate within a certain limited territory, or to seek business only from certain classes of trade. In any event, he faces a real problem in determining how he should apportion the efforts of his organization among the various products, territories, or classes of trade for which he is responsible. In making this determination he requires thorough and detailed analyses of the various segments of his markets. (Methods of making such analyses are covered in Chap. V, *Industrial Market Research*.) He must formulate a plan of action which insures that his salesmen reach every potentially profitable prospect sufficiently often, and at the proper time if a seasonal factor enters in. His plan should provide for the full utilization of the time of all his men. He must provide for an adequate balance of effort between old customers and new prospects.

Selective Selling.—A sound plan for controlling an industrial sales force will ordinarily embrace the principle of "selective selling." Every call which a salesman makes costs the company employing him a definite amount of money, perhaps \$2, or \$5, or \$10. Every call represents an investment made in the hope of securing business. Sound business sense dictates that the investment made in the hope of securing a customer's business should not exceed the gross profit which would result if the business were secured. Scrutiny of one industrial salesman's records showed that he had in one year made 27 calls upon a certain customer who had bought \$300 worth of the company's merchandise and had no use for any more. That salesman's calls cost, on the average, about \$5 apiece. The gross margin on the business secured was about 20 per cent. In other words, \$60 of gross profit was bought at a cost of \$135.

Left to themselves salesmen seldom distinguish between profitable and unprofitable customers. Particularly in industries which employ low-paid salesmen of mediocre ability, the men

follow the line of least resistance. They call where they are well received. Chance determines the distribution of their calls among customers. Large prospects may receive wholly inadequate attention, while small buyers are visited two or three times as often as is necessary to hold their business. The result is a high ratio of sales expense and a loss of potential volume. It is clearly the job of the sales manager to differentiate between profitable and unprofitable customers, to determine the frequency with which customers shall be visited, and to direct his salesmen in sufficient detail so that their time is used to produce a maximum of profit.

The importance of selective selling in holding sales expense to a reasonable figure and in the efficient utilization of salesmen is indicated in the following analysis of sales of a company selling to the industrial market.

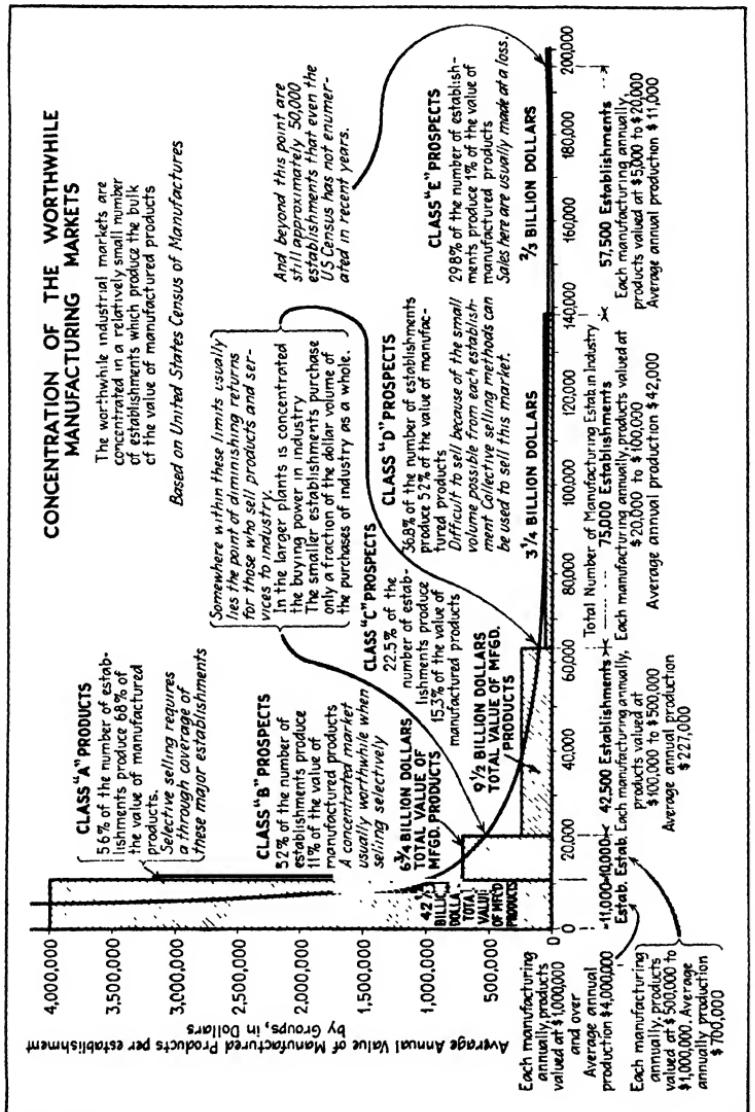
TABLE III

Customer size group	No. of customers	Per cent of all customers	Volume of sales	Per cent of total volume
Over \$100,000.	54	3.3	\$14,923,000	60.4
\$50,000-\$100,000	46	2.8	3,126,000	12.6
\$10,000-\$50,000	205	12.4	4,657,000	18.9
\$ 5,000-\$10,000.	156	9.7	1,060,300	4.2
\$ 1,000-\$5,000.	317	19.3	702,660	3.0
\$ 500-\$1,000.	199	12.0	131,760	0.5
Under \$500.	665	40.5	106,290	0.4
Totals.	1,642	100.0	\$24,707,010	100.0

That this is a common situation in industrial marketing can be surmised from Fig. 29.

Customer and Prospect List. —The basis for a proper system of planning industrial salesmen's activities is a complete listing of customers and prospects. For a going concern, the nucleus is its present list of customers, or its mailing list. It is desirable that the listing should include every possible customer. Trade directories, lists purchased from houses specializing in their preparation, or perhaps even a thorough canvass can be used to insure that all customers and prospects are listed. A valuable means for checking the completeness of a list of manufacturing

plants is afforded by the *Market Data Handbook of the United States* (published by the U. S. Department of Commerce), which



ing Markets. (*Courtesy of McGraw-Hill Publishing Company, Inc.*)

lists the number of plants in each industry with classification by counties.

Classification of Customers.—Once a complete list is secured, it is essential to evaluate each name on the list in terms of its value as a customer or prospect. Past sales records of the company will qualify many. The sales manager's knowledge of the industry will probably qualify still others. Directories and trade lists will furnish means of qualifying still more, perhaps on the basis of men employed, or of capitalization or other factors. In the cases which still remain doubtful, salesmen may be required to call and to report the estimated annual consumption of the product in question. The ultimate in analysis of prospective customers was achieved by a concern which sent a crew of market-research men into a large industrial state with instructions to cover every city and town, visit every manufacturing establishment, and secure information sufficient for classification. While the result was a thoroughly accurate census of potential prospects, it should have been possible to secure results of substantially as great practical usefulness at considerably lower expense.

The best measure of the value of a prospective customer is his rate of consumption of the product being sold. For installations and items of accessory equipment there is, of course, seldom a regular rate. A rough approximation as to the buying potentiality of each customer for such goods can sometimes be worked out indirectly by considering rate of production, obsolescence policies, or similar factors. With other industrial goods of less durability, estimates of consumption are more easily made. Possibly the best source is through reports of salesmen. One company succeeded by this means in accounting for 85 per cent of the total volume of trade in its field over a period of two years. With materials there is usually a fairly constant ratio to output. If it is known that a certain producer buys all his material from the investigating company, and his output is known approximately, it is probably safe to assume a factor which can be applied to other producers. Estimates of consumption by individual concerns need not be exact to be valuable in apportioning sales efforts.

It is not particularly difficult to determine what constitutes a profitable customer or a worth-while prospect, particularly if an adequate system of accounting for selling costs is employed. Sales costs, of course, fall into two classes. There is the direct cost of securing an individual piece of business, and there is the burden of cost which is not allocable to individual customers or

transactions, such as expense of sales offices, management salaries, etc. At least one company classifies its accounts into three groups. Group A includes those concerns which can buy in sufficient volume so that the gross margin in dollars more than covers both direct selling costs and a proportionate share of burden allocated on a volume basis. Group B includes those concerns whose volume affords a margin in dollars sufficient to take care of the direct selling cost and to cover a portion of the overhead expense. Group C includes those prospects whose potential volume is insufficient to cover the direct expense of soliciting their business. The sales manager for this company prescribes as many calls as are necessary to cover thoroughly prospects in the A group. The determining factor is the number of calls which can be made without overpressing the customer. The B group is covered as thoroughly as possible without increasing the selling force. The determining factor in allotting calls to a customer in this group is the number which can be made without exceeding a predetermined ratio of direct selling expense. Concerns in the C group are not solicited unless there is distinct reason to believe that future increases in consumption may make them profitable customers. They may be turned over to distributors, or their business may be solicited by mail.

A rather elaborate method of apportioning sales effort to the individual account uses the form illustrated in Fig. 30, which is filled out by the salesman.

The total volume of purchases of a customer or prospect is not alone a sufficient basis for classification. The significant figure is the business which is "available." Certain large users may be closely tied to competitors by interlocking directorates, reciprocal buying arrangements, or other factors. They need be visited only at intervals to check the continuance of the situation which makes them unavailable as customers. Some buyers have a definite policy of purchasing from two or more sources of supply. The decision as to how much sales effort to apply must be related to the 50 per cent or less of their business which can possibly be secured. Credit conditions will sometimes make unavailable a customer who would be worth while on the basis of volume alone. In some cases company policy makes it undesirable to solicit business from a worth-while customer, as, for instance, where an agent or distributor must be given protection.

Territory Adjustments.—Once a complete list of present and prospective customers has been drawn up and the proper number of calls allotted to each, it is a simple matter to determine how well existing territories are balanced. The salesman's job in any district can be measured in terms of man-days by dividing the

PLAN FOR MORE EFFECTIVE SALES EFFORT												
SALESMAN'S RECORD OF CALLS												
(WEEK ENDING DATES)												
4TH QUARTER	1st QUARTER			2nd QUARTER			3rd QUARTER			4th QUARTER		
	JULY	AUG	SEPT									
1934	1934	1934	1934	1934	1934	1934	1934	1934	1934	1934	1934	
1	2	3	4	5	6	7	8	9	10	11	12	
13	14	15	16	17	18	19	20	21	22	23	24	
25	26	27	28	29	30	31	1	2	3	4	5	
6	7	8	9	10	11	12	13	14	15	16	17	
18	19	20	21	22	23	24	25	26	27	28	29	
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23	24	25	26	27	28	29	30	31	1	2	3	
4	5	6	7	8	9	10	11	12	13	14	15	
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28	29	30	31	1	2	3	4	5	6	7	8	
9	10	11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	31	1	
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28	29	30	31	1	2	3	4	5	6	7	8	
9	10	11	12	13	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	28	29	30	31	1	
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25	26	27	28	29	30	31	1	2	3	4	5	
6	7	8	9	10	11	12	13	14	15	16	17	
18	19	20	21	22	23	24	25	26	27	28	29	
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21	22	23	24	25	26	27	28	29	30	31	1	
1	2	3	4	5	6	7	8	9	10	11	12	
13	14	15	16	17	18	19	20	21	22	23	24	
25	26	27	28	29	30	31	1	2	3	4	5	
6	7	8	9	10	11	12	13	14	15	16	17	
18	19	20	21	22	23	24	25	26	27	28	29	
30	31	1	2	3	4	5	6	7	8	9	10	
11	12	13	14	15	16	17	18	19	20	21	22	
23	24	25	26	27	28	29	30	31	1	2	3	
4	5	6	7	8	9	10	11</td					

6 and 12 calls per year on an important account may be the difference between gaining it and losing it to a competitor. Other salesmen may have assignments which are too light. The usual result will be the making of extra calls upon customers of little importance. Where such an unbalanced condition exists, a realignment of territories will often yield a significant increase in sales volume without adding to costs.

Routing.—The question of routing salesmen is one which has come in for a great deal of discussion. In some cases salesmen are held to routes rigidly set at headquarters, either the home office or branch office. In other cases the salesman himself is given a free hand in covering his territory. The former method lacks flexibility and may prevent the proper development of special situations such as arise from customers' inquiries or complaints. The latter plan is likely to result in unduly high traveling expense and spotty covering of the territory. Generally speaking, the more routine the sales job, the more rigid may be the central control of salesmen's routes. As a matter of practical control, the office from which a salesman works ought to be able to reach him every day. This almost presupposes some plan of routing formulated in advance, deviations from which should be reported to the office by the salesman. There is a tendency in many concerns to encourage the salesman to plan his own route, subject to the approval of his manager. This method avoids the pitfalls which often beset a plan prepared only with the aid of a map and a prospect list by an individual sitting at a desk perhaps hundreds of miles away.

Deviations from a set route are usually permitted at the salesman's discretion, and in many cases are ordered from his headquarters. When the salesman changes the schedule he is usually required to notify headquarters, and in some cases is required to justify the deviation. Practice differs as to the point at which the scheduled route is resumed after a deviation has for some reason been made. In some cases the salesman is instructed to pick up his original schedule at the point where he left it, simply setting the entire plan back by the time lost, or perhaps making up the time by eliminating a few scheduled calls. Sometimes he picks up his schedule at the point called for on the date he has completed the special mission, leaving the intervening planned calls to be made on his next regular trip, or to be covered by mail from the office, or by telephone. In other cases he picks

up his schedule at the point to which he has been called and works on from there. Traveling expense, the importance of seeing customers on regular dates, and several other questions enter into this decision. The practice followed by several concerns of sending instructions from the office to the salesman who has been called off his regular route has much to commend it over the adoption of a rigid method of procedure.

Quotas.—An important phase in securing effective control over an industrial sales force is the establishment of a method for measuring the performance of salesmen. The commonest form of measuring stick is the so-called sales quota. In many companies the sum total of the quotas set for salesmen is closely related to the budgetary control system (see Chap. IV). The sales manager ordinarily uses the quota also as a private control device whereby he may pick out those men who need additional stimulus or special instruction. To be useful for this purpose, a salesman's quota must clearly represent the amount of business which the man in question can reasonably be expected to produce from his territory under existing conditions. Carelessly set quotas are of little value as control instruments. For instance, the practice formerly widely used of setting quotas on the basis of past sales fails to take into account either territory potentials or existing conditions. A salesman whose performance is challenged has a host of alibis which the sales manager may refuse to consider but cannot controvert. Such quotas may afford pretexts for reprimands but do not lend themselves to constructive attempts to improve performance. Sound quotas must comprehend three basic factors: the amount of business which the territory may reasonably be expected to yield under normal conditions, the ability and experience of the salesman, and the deviation from normal of conditions in the territory.

Territory Potentials.—The territorial possibilities for some types of industrial goods are more easily set than is the case with consumers' goods; in other cases the problem is more complex. In some cases, such as operating supplies or accessory equipment sold to a horizontal market, it may be possible to develop quotas from statistical factors such as number of employees, connected horsepower, etc. Data on several such factors are available, by counties, in a publication, *A Basis for Establishing Industrial Sales Territories*, of the U. S. Department of Commerce. Such quotas are developed most effectively by correlating past sales

figures with various statistical indices to discover the relationships which govern sales possibilities. The method of setting sales quotas by correlation of external indices with internal sales data is well set forth in a series of articles by L. D. H. Weld.¹ Although this method has been employed almost exclusively for goods of general household consumption, it would seem to have possibilities for industrial goods of widespread application, such as lubricating oil or typewriters. The majority of concerns selling to the industrial market will find such methods of little use. Ordinarily an industrial sales quota involves listing the customers in a territory, estimating the probable total purchases of each buyer, estimating the portion of each buyer's business which the company may reasonably expect to secure, and finally combining these individual estimates into a territorial quota. The quota estimates for individual customers are of considerable value as a control device, although obviously great accuracy cannot be expected in a single case. Consider for example a possible situation where two salesmen have each failed to make their territorial quotas, but one has been consistently under the estimate for every customer, and the other has exceeded the estimate for some customers but fallen short with others. Clearly, different remedial action is called for in the two cases. Similarly, a valuable tool of control is the quota by individual products or sizes or types when the line includes more than a single item. Examination of a salesman's record in the light of detailed standards of this sort will often show up weaknesses in his knowledge of the line or in his ability to get results from various classes of customers.

Adjustment to Individuals.—The sales manager can never afford to forget that men differ both in ability and in psychological make-up. Some salesmen will invariably bring in a large proportion of the possible business in their territories; others seem constitutionally unable to produce more than mediocre results. If men of the latter type are to be kept on the sales force, it does no good to judge them against quotas which they cannot hope to attain. This factor may well be taken into account by giving considerable weight to past performance. Sometimes it may be desirable for a sales manager to assign to his men quotas larger or smaller than those which he expects

¹ See *Printer's Ink*, vol. 152, July 31, 1930, pp. 25-61; Aug. 7, 1930, pp. 69-70; Aug. 14, 1930, pp. 41-2; Aug. 21, 1930, p. 97.

them to make, and by which he judges them. One man may work best when under pressure and relax when he has attained his objective. Best results may be secured by giving him a quota a little beyond his ability. Another type of man tends to worry and have his efficiency impaired until he has reached his objective, then gains confidence to push on with vigor. This type may best be handled by setting quotas somewhat low. It is obvious that this use of "psychological quotas" is not equitable when the compensation plan is related to the quota system.

Quotas as an Aid to Supervision.—Once a reasonably accurate method for setting sales quotas has been attained, comparison of the individual salesman's volume with his quota is a valuable aid to control. Those men who have made their quotas need no particular attention. With the men who are running behind quotas, a study of the data derived from their reports will often permit diagnosis of their difficulties. Timely attention, either by personal letter or by conference at the office or in the field, may make possible the elimination of these difficulties. When a man fails to make quota there are four possible causes:

1. Special conditions in his territory may have so changed the situation that the quota is not a true picture of attainable possibilities. If this is so, the quota should be revised.
2. The man is not presenting his proposition as effectively as competitive salesmen. This may call for additional training, perhaps for the temporary assistance of a highly able salesman to travel with him, inspect his method of work, and give him corrective instruction. This form of field supervision is an extremely important part of effective sales management. The average salesman needs occasional checking up and coaching as much as the average golfer.
3. The man may have had his morale sapped by personal difficulties, or by ill health, or overwork. The able sales manager who enjoys the confidence of his men can in a man-to-man talk uncover such situations and take steps to correct them. There is no means of stimulation so strong as a sincere interest in the welfare of the individual men on the sales force. This type of field supervision has become somewhat unfashionable in many organizations, yet it must be regarded as unquestionably one of the strongest points in sales force control. Other less personal activities may prove adequate in times of great business activity, but in times of depression they are likely to lose their stimulus.
4. The man may be lazy or unwilling to follow instructions. If a study of his work in the field reveals either of these shortcomings, recourse must be had to vigorous corrective measures, and, if these fail, to discharge. Such cases should be few in organizations where salesmen are carefully selected.

Reports.—The setting of complete and clearly defined objectives for each man merely affords a proper basis for control. Effective direction requires continuous knowledge as to how well the objectives are being attained. This implies a series of regular reports. The essentials of a system of salesmen's reports are:

1. They must indicate where and when a call was made, who was seen, (names and titles), what products were talked about, whether any specific sale was in prospect, and the status of the transaction.

SALESMAN'S REPORT - SALESMAN'S COPY					FORM NO 220							
PRINTED NAME & A SALESMAN	REGIONAL OFFICE	DATE			REPORT NO							
FIRM	VISIT <input type="checkbox"/> TELEPHONE <input type="checkbox"/> LETTER <input type="checkbox"/> THIS FIRM INTERVIEW NO											
NO AND STREET	CITY	STATE OR PROVINCE			BUSINESS % OF NORMAL (REVIS 5% EVERY TIME REPORTING)							
INTERVIEWED	TITLE											
KIND OF BUSINESS												
WHAT IS MADE FROM OUR PRODUCTS?												
COMPETITIVE PRODUCT IN USE (OR QUOTED)	COMPETITIVE SELLER	PRICE DELIVERED	NORMAL MONTHLY CONSUMPTION	CORRESPONDING BROWN CO PRODUC	QUOTED D/P/D							
EXPLANATION OF WHY WE ARE NOT GETTING AT PRESENT												
BROWN CO PRODUCTS	CURRENT ADDITIONAL BUSINESS CONTRACT US MONTHLY	UNIT	REC	QUALITY	SERVICE	GENERAL SATISFACTION	DISTRICT POLICY	TYPE STAND	INTERESTED	TESTIM	TIME	PROGRESS INDEX
OBTAINED ORDER FOR												
REMARKS ON PLANS FOR GETTING THE BUSINESS AND PROGRESS BEING MADE												
SHOULD CALL EVERY												

FIG. 31.—A salesman's report form which endeavors to accumulate information useful to the salesman on his next call, as well as to the management for control purposes. The salesman is furnished with a typed copy of each report which he uses to prepare himself for his next visit. His clerical work is limited to indicating changes in the sales situation with the particular customer. (Courtesy of Brown Company.)

2. They should include any relevant information bearing on future expectations of business from the customer (such as a projected expansion of plant, a change in management, etc.).
3. They should include any information which supplements or supersedes existing data on buying influences (such as a new purchasing agent, or a change in title of a key man in buying). This material

is invaluable in keeping mailing lists up to date and thus making direct-mail advertising an effective supplement to personal selling.

4. They should be simplified as far as possible to reduce the amount of clerical work required of the salesman.
5. They must be turned in promptly, so that they may be used for control as well as for historical purposes.

FIG. 32. — A report form used by missionary salesmen. This not only serves to remind the salesman of all the activities for which he is responsible, but furnishes the management with a better idea of what its missionary force is doing than is possessed by many concerns. (*Courtesy of Brown Company.*)

The tendency is definitely away from the long and involved report form. In many cases the amount of writing to be done by the salesman is reduced by furnishing him with report blanks with the customer's name and location and the already accumulated data regarding the account typed in by clerks in the office. This reduces his task to checking the date of his visit and the persons seen, and the entering of any new information secured. This plan not only saves the salesman's time but it makes the report blank a valuable aid to him in preparing his approach. It thus encourages him to regard the report system as a valuable

tool rather than a needless drudgery. In some cases promptness in reporting is encouraged by combining the expense account form with the daily or weekly report of calls.

Utilization of Reports.—The very best report system is of no value unless it is effectively utilized. First the salesman's call reports should be checked against his schedule to make sure that no prospects have been missed, and if some omissions are found

Printed in U.S.A.		ONCO SALESMAN'S REPORT - SALESMAN'S COPY			Form No. 220
SALESMAN _____		REGIONAL OFFICE _____	DATE _____	REPORT NO. _____	
FIRM _____		VISIT <input type="checkbox"/>	TELEPHONE <input type="checkbox"/>	LETTER <input type="checkbox"/>	THIS FIRM INTERVIEW NO. _____
NO AND STREET _____		CITY _____		STATE OR PROVINCE _____	
INTERVIEWED _____		TITLE _____		BUSINESS S OF NORMAL (REVISES & EVERY TIME REPORTING)	
KIND OF BUSINESS _____					
Types of sales being made Daily production current run Retail prices Inventories: What One No. using Competitive products strong				Upper Material Competitive products strong Part using One in Trans <input type="checkbox"/> Vamps <input type="checkbox"/> Underlays <input type="checkbox"/> All over <input type="checkbox"/> Tops <input type="checkbox"/> None <input type="checkbox"/> Lining <input type="checkbox"/>	
Factors preventing getting it Price Quality Service Overstocked Showmaking trouble Actual customer resistance Fear of customer resistance All other policy Leather being specified Duration of product Procedure				What is our sales due to these factors Additional bus. could give us daily for collection Factors preventing getting it Price Quality Service Overstocked Showmaking trouble Actual customer resistance All other policy Leather being specified I & C. hope too high price for it Dis trust of product Procedure	
1. Onco in their new samples? Types of outlets they sell to Is onco customer or known				1. Onco Upper in their new samples? OBTAINED ORDER FOR _____ REMARKS ON PLANS FOR GETTING THE BUSINESS AND PROGRESS BEING MADE	
				SHOULD CALL EVERY _____	

FIG. 33.—A report form used by salesmen engaged in promoting a new product. The emphasis here is on securing information which will be useful in formulating sales plans. (*Courtesy of Brown Company.*)

it must be decided whether it is vital to cover those customers by mail or telephone or special visit. Clerks should keep a record of calls, and the sales manager or an assistant should check this record against the planned frequency for each customer in order to be sure that worth-while prospects are not being neglected and that too much time is not being spent on unimportant buyers. The object here is not to stifle the salesman's initiative and confine him to a rigid routine, but to control the situation by being able to require justification for departures from the original

plan. Call reports should be scanned for new information of importance in estimating sales potentials and, by the advertising department, for necessary changes in mailing lists.

Customer Records.—The very heart of an intelligent sales manager's control over his men is the customer record system. This may take various forms according to the size and nature of the particular business. Most important of all, it must be compact and convenient. Experience proves that if records are not easy to use they are not used. It must be timely. No sales manager can make effective use of records which do not portray current conditions. It should carry as much detail as possible without sacrificing convenience and timeliness.

The usual customer record system involves either a loose-leaf book or a card system. Visible-record card systems seem to be the most popular. Facts usually recorded include:

1. The name, location, and credit rating of the customer.
2. The name of the salesman serving the account.
3. The names and positions of men influential in purchasing.
4. A statement of any special conditions surrounding the account, such as special discounts, contracts, etc.
5. Data on the customer's total volume of purchases.
6. A record of past sales to the customer (often segregated by lines of product).
7. A record of the number of scheduled calls to be made on the customer.
8. A record of the calls actually made (for control purposes this record is often maintained by means of colored flags, so that the sales manager may see instantaneously whether a customer is being neglected).

Armed with such facts as these about each customer, the executive in charge of sales supervision can usually deduce quite accurately what is wrong when one of his salesmen begins to slip and can apply the proper remedy.

Sales/Calls Ratio.—There are certain general indicators which are often of material help to sales executives in diagnosing difficulties. An important index of this sort which may be kept on each salesman's record is the ratio of sales to calls. When this ratio for an individual falls it probably indicates either unfavorable conditions in the territory or a loss of effectiveness in presentation. If a check-up eliminates the former possibility the salesman should be summoned to the home office, or, better still, visited in the field and steps taken to straighten out his difficulty. Too high a ratio of sales to calls may similarly indi-

cate a need for supervision because it is likely to mean a tendency to call only on assured customers and to neglect the cultivation of new prospects. When general business conditions become bad,

Fig. 34. A customer record card used by a large manufacturer.

this ratio is likely to decline for the sales force as a whole. If it declines without a drop in general business activity it is high time to look for some competitive weakness in either product or price. Whatever the cause, this ratio should not be permitted to fall too low. It is closely connected with morale, for the salesman's job more than any other requires the constant stimulus of achievement.

ment. One manufacturer was confronted by the fact that his customers were temporarily able to buy his product only infrequently, yet desired to maintain his usual frequency of contact.

IND. NO.	10	20	30	40	50	60	70	80	90	100	110	120	0	0	01	CUST. NO.
YEAR	WINTER M HOTELS	SPACER MOTORS	D CENTRAL PUMPS	4 ELECTRIC WELDING	5 MAG. HEATERS	6 TRANS. CAPACITORS	7 CABLES	8 LAMP EXPOSURES	9 DRILLS	10 WRENCHES	11 REPAIR KITS	12 PAPERS	13 LADDER APP. & SUP.	14 TOTAL TIME SPENT	15 ALL BILLED	
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and to hold old ones. Failure to add a certain number of new accounts regularly is a danger signal. It indicates a narrowing competitive base, because it is inevitable that some old accounts will be lost from time to time. The sales manager will usually find it advisable to provide himself with analyses, both as to volume and number of customers, which indicate whether a proper balance is being maintained between service to old customers and solicitation of new business. In a considerable number of concerns salesmen are required to file special reports when they have lost a piece of business with which they have been in touch. Such reports usually call for a statement as to the size and nature of the order, why it was lost, who got the order, and upon what basis. While too much reliance should not be placed upon salesmen's explanations of why orders were lost, such reports are often helpful in discovering deterioration in quality of product or delivery service, discrepancy in price, or other handicaps.

Field Supervision.—With the exception of a few large organizations which can employ trained specialists, the task of field supervision must usually be handled by the sales manager, or an assistant, or a branch office manager, all of whom have a wide range of other duties. Because of the pressure of day-to-day routine it is difficult to get them to devote adequate time to the supervisory task. Another important obstacle is the lack of skill in training, a lack which frequently leads to the substitution of mere exhortation for a sincere search for the causes of inadequate performance. An organization in which field supervision is carried on in desultory fashion invariably falls far short of its maximum efficiency. The most highly organized system of desk supervision cannot take the place of actual contact with the men in the field under actual operating conditions. One beneficial result of depression conditions is that sales executives are forced to get out into the field and learn to do a good supervisory job.

Incentives.—Incentives and penalties constitute a most important group of control devices. By their proper application they guide salesmen's activities into the desired channels. Incentives are applied through compensation plans and contests, and through personal inspiration. Among devices in the latter group are conventions, "pep" letters, and the type of field supervision outlined above. With the class of salesmen usually found in the industrial field, such devices are as a rule successful in direct

proportion to their sincerity. Contests are of less value, apparently, in the industrial field than in the marketing of consumer goods. With markets which are as a rule inelastic, the application of extra selling pressure which a contest engenders is likely to pile up present volume at the expense of future sales. However, contests having as their object the addition of new accounts have in some cases proved of decided value, especially where emphasis has been placed on following up the newly secured customers.

A constructive use of contests in industrial selling is seen in the tendency of many companies to stage contests between the forces of the various branch offices, making attainment of quotas the criterion of judgment. This not only enlists the competitive spirit of the individual but it brings to bear upon the man of low accomplishment the assistance and perhaps the prodding of his fellows. Thus it is a valuable aid in the training problem as well as in that of control.

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CHAPTER IX

COMPENSATION OF INDUSTRIAL SALESMEN

Compensation and Control.—Undoubtedly the most significant tendency in methods of compensating salesmen in recent years has been the movement toward using the plan of payment as a means of controlling the salesman's activities. Incentives have been used, not only to induce harder work, but to guide, directly or subtly, his efforts into desired paths. This tendency undoubtedly arises from the fact that the salesman operates at a distance from his headquarters and is for the most part free of any direct supervisory control. By adopting a suitable method of payment it can often be arranged that strict compliance with his superior's wishes will result in increased earnings. There are limitations to this use of the compensation plan. An attempt to obtain too great a degree of control through it, to try entirely to replace direct supervision by incentives, is likely to defeat its own ends. In many industrial sales organizations control through compensation presents an involved problem. Perhaps for this reason few companies have used it with full effectiveness. In some cases, perhaps, there is no workable solution to the problem of facilitating control in this manner. Nevertheless, the possibilities of compensation as a means of control are so great as to justify a much more thorough study of the payment plan in relation to sales objectives and the conditions under which salesmen work than is customarily made by the individual concern.

Types of Compensation Plans.—A rough classification of compensation plans for salesmen divides them into three general groups:

1. Straight salary plans.
2. Straight commission plans.
3. Plans which combine the elements of salary and commission in varying proportions.

Straight Salary.—Paying salesmen on a straight salary basis seems at first glance the simplest plan. Yet there are various problems involved, particularly in the determination of what

constitutes a proper salary. There may exist an approximate market price for new men but few concerns have really adequate methods for determining whether or not a specific increase in salary is warranted. Effective administration of a salary plan requires the existence of definite policies as to entering salaries and as to increases. It also presupposes a reliable method for judging the performance of each individual man.

Payment by straight salary permits a maximum of direct control by the company over the salesman's activities. He may be routed on a rigid schedule and required to render regular reports. His time may be divided between selling and nonselling activities in any desired proportion. He may be required to do missionary work, or service, or to make collections. Where the salesman's task is so varied that there is no real standard of performance other than his effectiveness in carrying out orders, the salary plan is unquestionably the best possible.

A further advantage of payment by salary is that the salesman has an assured income and is not subject to financial worries. Few men work effectively under heavy financial pressure and this is particularly true of industrial selling where knowledge, resourcefulness, and patience play so large a part. Turnover of salesmen is generally lower under a salary plan of payment.

These advantages are in many cases offset, however, by the fact that the salary plan offers a minimum of incentive. On the positive side there is only the possibility of promotion or a raise in salary, or on the negative side, discharge. These incentives are not sufficiently direct to be highly potent. There is a tendency for the salesman under a straight salary plan to do merely enough to "get by." This indicates that where a salary plan is used there must be a higher degree of care in the selection of salesmen and a greater emphasis on motivation by other means than financial incentives. Too often the standard of the entire sales force is set by the level of performance which is just sufficient to avoid discharge.

With companies whose sales are subject to wide seasonal or secular fluctuations, difficulty may be caused by the straight salary method of payment which makes total selling cost practically fixed in terms of dollars. As volume rises, the ratio of selling cost drops. Unfortunately at such times additions are often made to the sales force or increases granted which expand the salary roll more or less in proportion to the increase in volume.

When sales volume drops it is found that salary reductions are difficult to effect and that discharge of part of the force may only result in further reductions in volume.

The salesman on salary is practically always concerned about the possibility of a raise. This is rather natural, since his remuneration is not automatically determined by his attainment of standards definitely set forth. Consequently in organizations using the salary basis, a substantial proportion of the sales manager's time is likely to be spent in considering requests for salary increases. Aside from the waste of executive time involved, the effect on the efficiency of a man who has been

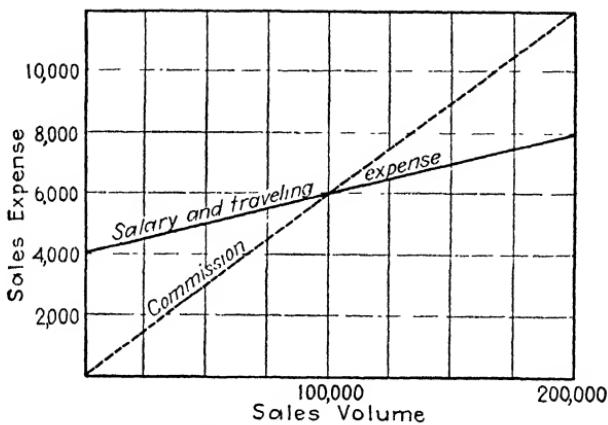


FIG. 35.—Graph illustrating the effect of volume fluctuation on direct selling expense under salary and straight commission plans of compensation. For simplicity's sake it has been assumed that traveling expense is directly proportional to sales, an assumption which is of course not strictly true in practice.

refused a raise to which he has convinced himself he is entitled may be highly prejudicial. These difficulties may be avoided in large measure by setting a regular time, perhaps annually or semi-annually, when each salesman's record is discussed with him by his manager and such increases given as are warranted.

It seems inevitable that salesmen's salary increases should be in large measure influenced by seniority. This has led to a trying situation in many long established concerns which have done little expanding and have had a low rate of turnover of salesmen: The need of giving occasional raises to serve as incentives often results in the older men being paid beyond their true worth and in a ratio of sales cost which places the concern at a disadvantage as compared with new competitors.

Straight Commission.—The straight commission plan provides a maximum of incentive. Under this arrangement the salesman is virtually in business for himself. His earnings are directly determined by his productivity. Particularly with new products with wide markets, where all fields are virgin and sales volume is largely dependent on the activity and ability of the salesman, the straight commission plan reaches its maximum usefulness. Ordinarily in industrial selling, however, factors beyond the salesman's control have a profound influence on volume.

Under the straight commission plan, particularly when expenses are paid by the salesman, the ratio of selling cost to volume of sales tends to remain constant. Where other costs are also largely variable with volume, this may prove a decided advantage. It eliminates the need of attention to selling costs and of supervision to hold them in line. Problems of salary increase do not come up. Poor salesmen soon eliminate themselves by failure to earn a living.

The straight commission plan, however, practically eliminates any possibility of effective control by other means. The salesman is essentially an independent business man, and between him and the company he represents there may arise conflicts of interest. These are usually resolved, quite naturally, in the direction of the salesman's financial advantage. He will prefer, for instance, to seek business from established customers rather than to do missionary work which yields him no immediate profit, and to carry on which he must forego present earnings. He will often "high-spot" his territory, neglecting customers his company wants covered. His interest is in volume of sales, and not in their profitability. Consequently his efforts, from the company's point of view, may not attain the ideal balance between high and low profit items. In order to attain volume easily, he is likely to bring continual pressure for price concessions. He may oversell customers, doing incalculable harm to future good will. He is not concerned with selling those goods which are most desirable from the manufacturing point of view. Further, the salesman on commission is likely to view his list of customers and prospects as his own personal property, and to refuse to cooperate in reporting on their status or in furnishing information for advertising support. This is understandable, for he must always fear that his company will supersede him. From the company's point of view, this situation is dangerous, as the

loss of a salesman to a competitor may mean the loss of all its business in his territory.

The commission plan usually results in a fairly high turnover of salesmen, particularly where volume of sales is subject to fluctuation. In times of good business earnings are high. The average salesman increases his standard of living as fast as his earnings increase. When his commissions fall off because of drops in volume beyond his control, he is likely to be adversely affected by financial pressure and perhaps forced to seek another job. A salesman on salary may be provided with an understudy; one on commission will usually not permit such a step.

Method of Payment and Salesman Types.—There is usually a considerable difference in the types of men attracted by the salary and by the commission plan of payment. A fixed salary appeals to the man of more thoughtful and analytical character, such as the engineer-type salesman, who values stability of income above high but uncertain earnings. The commission plan draws the "high-pressure" salesman, volatile, enthusiastic, impetuous, and brooking little interference. Which type is needed for a specific product depends largely on the characteristics of the product and of its market. If a great deal of aggressive selling must be done and if there is little possibility for direct supervision; if the customer does not repeat his purchases at fairly frequent intervals; and if the major emphasis is on volume alone, the commission plan will work most effectively. If the service aspect of selling is important; if frequent repeat orders are sought; and if it is desirable to follow a selective selling program, concentrating on certain items and trade groups, then a method of compensation in which a set salary is the major item is called for. The type of management and its tactics will obviously be different in the two cases. In the former case the emphasis must be on stimulation of ambition and maintenance of morale; in the latter, on careful detailed planning and close supervision.

The ideal compensation plan under most circumstances involves a fixed salary sufficient to meet the salesman's living expenses and thus insure against financial worries; and a variable extra amount proportioned automatically to the degree to which the company's objectives are attained. This may mean volume, or gross profit, or low expense, or various other factors. The fixed portion of the payment justifies the exercise of a certain measure of direct control of the salesman's activities, while the

variable portion of the payment must be sufficiently large and attainable to constitute a real incentive.

Salary Plus Bonus.—A common method is to pay a base salary which represents compensation for what may be termed "normal" effort, and to supplement this salary with a bonus for extra energy or intelligence. To be successful, this plan requires a definite measurement of what constitutes "normal effort" and a scheme for associating a specific reward with a specific performance. To let the awarding of bonuses depend on the personal judgment of a single executive, or even a group, taints the plan in the minds of the salesmen with suspicions of favoritism. Instances have been known where such bonus plans have diverted salesmen's minds from thoughts of selling their customers to thoughts of how to make the best impression on the boss. In fact, splitting the compensation between salary and a bonus awarded on the basis of intangible standards is not significantly superior, as far as incentive effect is concerned, to a straight salary plan. Definite impersonal standards are essential.

The sales quota, if it can be set accurately, furnishes a highly satisfactory yardstick. Where exact fulfillment of quota is sought (as may be the case in a concern operating close to capacity and subject to increasing costs), a lump-sum bonus may be paid when the quota is attained, with no further reward for extra sales. Where there is a strong desire for extra volume and little danger of overselling customers, a bonus may be paid in the form of a sliding commission on sales over quota, *e.g.*, 1 per cent on the first \$10,000, 2 per cent on the next, 3 per cent on the next, and so on. For a company with considerable unused productive capacity it may be profitable to pay a rather substantial rate of bonus for sales over quota. The burden of fixed expenses is usually cared for in the quota, and the gross margin on extra sales is nearly all net profit.

The outstanding advantage of the bonus plan is its flexibility. If a substantial part of the total compensation is in the form of a bonus, salaries need not be pushed to excessive levels. In a business boom, for instance, salaries can be held reasonably constant while bonus earnings swell. When the reaction comes, total earnings automatically approach the base salary level. One troublesome problem which sales managers sometimes face is that of adjusting the compensation of older salesmen who have passed their peak. It is rank ingratitude to discharge them.

Reducing their salaries is an unpleasant task. Under an intelligently devised bonus system the problem automatically solves itself.

The bonus plan may also be effectively applied to other problems than that of stimulating volume. If it is desired that more attention be given to new prospects, a bonus for each new account opened will bring this about. If more intensive effort on existing customers is desired, a bonus for each account buying more than last year will stimulate it. If it is desired to displace an old product with a new one, a bonus may be paid on the sales of one and not on the other. Bonus payments may be proportioned to the profitability of the various items sold. One plan is to pay a base salary plus commissions on the various items in the line set up on the basis of their gross margin. This incurs the possible danger of the salesman's overstressing the high-profit items, or of his selling a customer an item not suited to his needs in order to collect a larger bonus. This danger may be lessened by setting up a quota on each item, and making the bonus dependent on the substantial fulfillment of all of the quotas. The difficulty here, of course, is to set quotas accurately for these subdivisions of the total volume.

Point Systems.—An outgrowth of the use of bonus payments to achieve specific objectives is the "point system." This endeavors to analyze the salesman's entire job and to set up standards for each phase, such as sales volume, number of calls, demonstrations, new accounts, service calls, collections, or regularity and promptness of reports. Ordinarily points are awarded for each task, each point having a definite cash value. The method permits a great deal of flexibility, as the number of points awarded for different activities may be varied from time to time as their immediate importance changes. Penalties may be applied, with points being deducted for failure to perform certain duties, or for poor performance as indicated by complaints from customers, return of goods, or falling off in sales. The advantages of the plan are offset to a considerable degree by its complexity and by the large amount of bookkeeping required. There may be squabbles between salesmen and management as to the number of points which have been earned. In theory the point system appears well adapted for use with industrial sales forces. In actual practice it has not worked well.

It is significant that most concerns which have tried it have abandoned it in favor of simpler schemes.

Profit-sharing Plans.—A considerable number of attempts have been made to relate salesmen's compensation to the gross or net profit produced by each man's activities, or in some cases to the profit earned by the business as a whole. This seems a questionable procedure, as it involves either keeping the salesmen in the dark as to the method of figuring their bonuses, or else giving them information as to the profit margin on each line. The former course is likely to lead to distrust and dissatisfaction; the latter to pressure to cut prices on highly profitable items, and to the leakage of competitive information. General profit-sharing plans have also been used, wherein the sales force divides on some predetermined basis a portion of the profits realized. The incentive element here is rather remote, and the possibilities of dissatisfaction rather great, inasmuch as profits are subject to many factors beyond the control of the individual salesmen. Few such plans have worked out satisfactorily. Profit-sharing plans have their place in business, but their utility as sales incentives seems to be limited.

Incentives for Expense Control.—Still other compensation plans involve attempts to enlist the aid of salesmen in reducing their traveling expenses, often a big item in selling costs. Under such plans the salesman is paid a salary and expenses, plus a bonus amounting to an agreed percentage of the saving in actual expenses below an allowed maximum. The maximum figure may represent the expenses of the previous year, or it may be a definite percentage of sales volume. Unless the salesman controls his own travel the possible savings under this plan are insignificant. If he does route himself the plan may result in the curtailment of traveling below the point necessary for effective coverage of his territory. Under ordinary circumstances traveling expense is more effectively controlled by other methods, leaving the incentive element to be utilized in more positive ways.

Group-bonus Plans.—One of the real difficulties of industrial selling is presented by the fact that often the efforts of several salesmen are brought to bear upon a single prospect. This condition has been made more common by the formation in recent years of many industrial mergers, as a result of which the various keymen in purchasing may be located in different sections of the country. This often requires the cooperation of two or

more salesmen operating from different branch offices. The selling job is frequently of a sort which makes the use of incentives highly desirable, yet it is extremely difficult to evaluate the part of each man in the completed sale so that each may be rewarded equitably. In some such cases the group-bonus principle has been adopted through the distribution of a percentage of sales or of profits among the entire sales force, either on a uniform basis, or according to seniority, quota fulfilment, or a rating plan.

An interesting use of the group-bonus principle has been developed by one important company in the industrial equipment field. The plan has also a profit-sharing aspect. At the end of each year, net profits, minus taxes and dividends (including 6 per cent on the common stock), are divided between the common stock and a main bonus fund. This fund is divided on a pre-arranged basis into an executive bonus fund, a subexecutive bonus fund, and a sales bonus fund. Previously, at the beginning of the year, a group of sales department executives has rated each member of the sales force in terms of his usefulness to the company. This rating takes the form of the percentage of the final sales bonus fund to which he will be entitled. Each month the salesman receives a statement of indicated profits for the year, so that he can determine the probable size of his bonus check.

The entire impelling force of this arrangement is toward cooperative effort, which is of paramount importance in the sale of this company's products. It should be pointed out that the ability to apply such a plan equitably is diminished as the sales force increases in size. Its successful operation depends on close personal knowledge of all the salesmen by the executives who do the rating, and upon implicit faith of the salesmen in the impartiality and integrity of the rating group. Reward for accomplishment during a specific year comes only in terms of improved rating for the succeeding year. The direct incentive effect is therefore mild. If there is no hope of a profit during the current year, the incentive effect would probably be little greater than that furnished by a salary plan.

Method of Payment.—The effectiveness of any incentive plan of compensation depends upon the relative size of the variable payment and upon the method by which payment is made. Generally speaking, the larger the bonus in relation to the salary, the greater is the incentive effect. The more immediately reward follows performance, the greater is its force. It is

important to strike a proper balance between size and time of payment. It is generally held to be advisable that bonus payments above the fixed salary should not become absorbed in covering the salesman's regular living expenses but should be utilized for special purchases, as a home, or an automobile, or for savings. If bonus payments are made concurrently with salary payments, however, the chances are that the salesman will use them for current expenses. A period of bad business will then necessitate readjustments in his scale of living which are likely to reduce his effectiveness. Drawing separate checks for bonus payments combats this tendency to some extent, but is troublesome and expensive. It seems generally advisable that bonus payments should be less frequent than salary payments: a monthly bonus with a weekly salary, a quarterly or semi-annual bonus with a monthly salary. The two payments may be further differentiated by disbursing them on different dates.

Some companies find it necessary to give attention to the problem of the salesman who tries to "beat the system." A bonus on sales over a monthly quota, for instance, may encourage a man who sees that he cannot make his quota in one month to withhold orders until the first of the following month. In some cases this has been solved by crediting orders as of the date shipment is made. In other cases the answer has been to lengthen the bonus period. One company pays a nominal bonus for quota attainment each month and a larger bonus quarterly for making quota each month. This is a decided stimulus to consistency. The obvious difficulty of splitting bonus payments in this way is that the individual check may become too small to constitute a very powerful incentive.

The relative proportion of compensation to be paid as salary and as bonus, and the timing of payments, must depend on the conditions and objectives of the company concerned. The objective in every case is so to handle the payments as to serve most fully the ends sought by the incentive plan.

Handling Traveling Expenses.—While not truly a part of the compensation plan, the method of handling traveling expenses is a closely related topic. Ordinarily when salesmen are paid straight salaries, the company pays all traveling expenses. When a straight commission plan is used, practice varies, but ordinarily the salesman pays his own expenses out of his commissions. In other words, the payment is usually made by the party controlling

the expenditures. The handling of salesmen's expense accounts and their proper supervision presents a real problem. Precautions must be taken against their "padding"; yet legitimate expenses necessary to effect sales should not become the subject of acrimonious debate. To draw the line is difficult. An increasing number of companies find it advisable to make definite allowances for hotels, meals, and mileage. This not only eliminates squabbles but it also saves a considerable amount of office overhead by simplifying the expense control problem.

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CHAPTER X

INDUSTRIAL SALES PROMOTION

In actual practice, the term "sales promotion" is used rather loosely. Where departments have been set up to handle this function, the scope of their activities varies widely. In some cases the sales promotion department conducts all the market-research work which is done, handles the direct-mail advertising, and reaches well over into what is commonly considered the domain of sales management. In other cases its activities are confined to a single phase of auxiliary sales work such as the handling of sales correspondence. Sometimes the function is not recognized by the setting up of a separate department but is handled as a side activity of the sales or advertising manager. As a more recently recognized function, it has frequently served as a catchall for duties not clearly belonging to either sales or advertising.

There is an increasing tendency to set up sales promotion as a separate and distinct function. This is undoubtedly due to a general recognition of the need to coordinate advertising and personal salesmanship so that maximum results are obtained from the combination of these activities. The primary job of a sales promotion department is to effect this coordination. Secondarily, it usually performs the many odd jobs which neither the sales manager nor the advertising manager feels disposed to claim. The function is distinctly a necessary one, although many concerns may not see fit to organize it as a separate department. In a fully functionalized marketing organization, however, we are likely to find a sales manager, an advertising manager, and a sales promotion manager, who together act as a sort of cabinet on sales problems and policies.

The duties which ordinarily are delegated to sales promotion departments are:

1. Development of new markets.
2. Service to the sales force.
3. Service to the advertising department.

4. Service to distributors.
5. Service to users.

Development of New Markets.—In the manufacturing division we ordinarily find that a new product passes through three stages. First it is perfected in the research laboratory. Then it enters a developmental stage in which the gap between the laboratory and the plant is bridged and the most practical method of production worked out. Finally it is put into full commercial production. In putting a new product on the market or in extending the use of an existing product into new fields, we have a close analogy to the situation in putting a new item into production in the factory. The market-research division secures data on markets. The sales promotion division corresponds to the development department in the plant, testing sales methods, approving or rejecting them, and finally turning over a complete and practical plan to the regular sales department.

In connection with this work, a promotional sales force may undertake to supply samples to customers in new fields and to obtain their reactions. It may visit a sufficient number of customers to determine who are the keymen in purchasing the particular type of product and to learn what are the buying and patronage motives which weigh most heavily with them. Perhaps the possible applications of a product are not fully understood. The sales promotion division may then undertake to explore various fields of industry to find uses which offer profitable markets. Test sales campaigns may be undertaken to determine what tactics are most productive, and what is the proper balance between personal selling and advertising or between the various available forms of advertising. In all of these activities, the sales promotion division functions as a "shock brigade," ultimately turning over its work to the regular sales force.

Service to the Sales Force.—A more continuous activity of the sales promotion division is the development of material to increase the selling efficiency of the regular sales force. One of the commonest forms is the preparation of material used by salesmen, such as sales manuals, portfolios of advertising material, and factual data and illustrative material which can be worked into sales talks. This may be carried to the point of developing a standard plan of approach to customers or even a standard sales talk of the type used by the National Cash Register Company.

Another activity along the same line is the preparation of means of visual demonstration of the product, such as samples and models, film slides, and motion pictures. All of these things are designed to increase the effectiveness of the salesman when he is in contact with the prospective buyer.

Equipment.—An example of effective sales promotion work along this line is furnished by the Alemite Sales Corporation. In selling its system of lubrication to industrial plants salesmen were expected to carry demonstration kits weighing approximately 90 pounds. Carrying such a kit from car to purchasing agent's office and perhaps from there to the plant engineer's office was exhausting labor. Failing to get an opportunity to make a demonstration after expending so many foot-pounds of energy was bad for the salesman's morale. In too many cases the kit remained in the car and the effectiveness of the sales presentation was consequently reduced. The situation was remedied by preparing a film-slide entitled "From Barrel to Bearing," which illustrated the services and its uses perhaps even more adequately. The film and its portable projector made a small, light kit. It was easy to induce its regular use in making the initial presentation. A later demonstration of the actual device could, if necessary, be arranged by appointment.

Developing Contacts.—Sales promotion can also help the salesman in establishing the initial contact. This is usually handled by sending a letter or telegram timed to arrive shortly before the salesman's visit. One purpose may be to introduce a new salesman and secure for him a reception as cordial as that afforded his predecessor. Another may be to announce a new product or new application, or a special "deal." Such an introductory letter may win a salesman a reception when he would otherwise be turned away by a busy purchasing agent. It serves the dual purpose of insuring that the prospect is informed of the new development even if the salesman forgets to mention it, and of cutting down the time required for the salesman to explain his proposition. In a new situation the average salesman likes to know that his coming has been announced in advance. It removes, at least to a certain degree, his distaste for making a "cold turkey" call. Another situation in which an advance letter is helpful is where some unsettled difficulty exists. Here the letter may briefly open up the matter and win for the salesman a kindlier reception.

Maintaining Continuity of Contact.—Another effective service which can be rendered to the salesman is the bridging of the intervals between calls. This is particularly useful when a plan of selective selling limits the number of personal calls to be made on small customers. It may be handled by mail, wire, or telephone. When a month is the proper interval of contact to secure a maximum of business, but expense precludes more than perhaps two to four personal calls per year, the preparation of letters, to be signed and mailed by the salesman between visits, is often extremely helpful. The Dennison Manufacturing Company has organized a special "Mail-Aid" department to help salesmen in such cases. When a salesman uncovers a possibility of some specific business which he cannot return to close, he is encouraged to fill out a request for Mail-Aid (see Fig. 36). Armed with the necessary details, the promotional division writes the customer and submits samples and quotations. Credit for the order, if secured, goes to the salesman. Still another situation where sales correspondence helps is the missing of a call by a salesman when for one reason or another he is called off his regular route. A letter or phone call assists in maintaining the desired continuity of contact.

Inquiries.—It is a common occurrence to receive inquiries or complaints from customers between scheduled calls. If the customer's volume of purchases is large, personal attention may be indicated. In many cases, however, the matter is not sufficiently important for an extra personal call. The sales promotion division can very effectively take over the handling of such cases and maintain the company's reputation for service, yet avoid incurring unreasonable costs.

Service to the Advertising Department.—There is an increasing tendency toward the use of specific performance data in today's industrial advertising. Probably the best material for this purpose is illustrated evidence of cases where the product has been put to interesting or profitable use. It is generally desirable, if possible, for the advertising manager himself to get out into the field and collect the material. However, he is seldom in a position to spend enough time in the field to keep in touch with all possible sources of such data. Salesmen are in direct contact with customers, but they often do not recognize good advertising material. The sales promotion division as part of its coordinating activities may well undertake to uncover and develop such

SALESMAN			
DISTRICT	No.		
Date			
MAIL-AID			
Prospects or customers			
NAME			
ADDRESS			
NAME OF BUYER OR INTERESTED PARTY			
BUSINESS	Good prospect for uplift and distinctive work	Good prospect for quality raise	
INTERESTED IN			
When in Market	My next visit will be about		
Do you want Mail-Aid to mention your name?		Yes	No
Shall we send hasty sketch?		If so send copy.	
What did you quote on?			
Are they purchasing Dennison goods now? Yes No		If Yes— What?	
REMARKS (be sure you tell us why you could not sell. Give Mail-Aid all the details you can. The more information you give us—the more in- telligent will be our letters.)			
<hr/>			
SIGNED			
REMEMBER—COOPERATION BRINGS SALES			
(Use Reverse for Additional Remarks)			

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FIG. 36.—Form used by salesmen of the Dennison Manufacturing Company to request the services of the "Mail-Aid" division.

cases as will help to make the company's advertising more vivid and effective.

Getting Salesmen to Use the Advertising.—A problem which is frequently faced by industrial advertising departments is that of inducing the sales force to utilize the advertising. This is partly due to lack of realization on the part of the salesmen that selling is often made easier by reference to current advertising which has been seen by the prospect. It is also due in part to the fact that many advertising men do not fully understand the point of view of the salesman or the nature of his problems. Here is another opportunity for the sales promotion division to coordinate. It can "sell" the company's advertising to the sales force. One means of doing this is to furnish salesmen with advance proofs of current advertisements, together with letters or bulletins which outline the company's selling strategy. Another sales promotion opportunity is to interpret to the advertising department the specific problems encountered by salesmen in the field, and their reactions to current advertisements.

Service to Distributors.—The sales promotion function usually develops to its greatest extent when sales are made through distributors. It is generally recognized that a manufacturer's selling job is not done when he has induced dealers to put his goods in stock. It is seldom possible to apply enough pressure to insure that the goods move on to users. Realizing this, it has become common for producers to advertise to users, inducing them to specify or seek out the advertised goods. To use a mechanical analogy, effective advertising to users sets up a suction which draws goods from distributors' stocks and thus lessens the resistance to the pressure applied by the sales force. The sales promotion department can facilitate the process in several ways.

Dealer Helps.—One of the vexing problems of the manufacturer who decides to sell through jobbers or mill supply houses is that of stimulating distributors to get a maximum of possible business. With many items to sell, the distributors cannot do much active selling for any one line. They are particularly weak in securing initial orders. Frequently their salesmen are not well informed on the markets for a manufacturer's product or on the sales tactics which are likely to prove effective in landing orders. A common activity of sales promotion departments is to furnish jobbers or agents with broad-

sides, folders, booklets, and circular letters to be mailed out to actual and prospective customers. This is a decidedly worthwhile activity, for it ties the name of the manufacturer and his product with the local source of supply. Its success depends upon the quality of the material furnished and the way in which it is used. Too often it is done wastefully. Almost any industrial distributor can show a vast stack of material sent him by manufacturers whose goods he handles—material which he feels is unsuited to his requirements or which has been furnished in excess of his needs. Ordinarily material for dealer mailings should be specially planned and printed to tie in with the specific local problems of the typical distributor. To do this requires a field acquaintance with these problems. The sales promotion division is ordinarily best fitted to handle the work. It may be advisable to have the advertising department cooperate by caring for the technical details of producing the material.

Whether mailing pieces should be furnished to the dealer or mailed directly by the manufacturer is a much discussed question. The general tendency seems to be for the manufacturer to furnish the material and pay the postage in either case. Many distributors dislike to furnish their mailing lists to manufacturers. This is mostly founded upon fear that the manufacturer ultimately may attempt to service the accounts directly. It is partly due to inertia. When dealers do the mailing, the most efficient distribution of material is not often secured. This is particularly true when the timing of the advertising is important. When mailing lists are supplied by dealers there is often a tendency to include too many names. Some concerns have found it helpful to insist that the salesman who secures the list check the names with the jobber's salesman or in some other fashion make sure that each name represents a real prospect. How far it is wise to insist upon this is of course largely a matter of the cost of the material to be mailed.

Sharing Dealer-help Expense.—A problem which always causes much discussion is the question of the extent to which the distributor should contribute to the cost of the promotional material sent him. Many manufacturers try to induce their dealers to share the actual printing, mailing, and postage costs. Others furnish the material and ask that the dealer pay the postage. Still others shoulder the entire expense themselves. Certainly if the dealer bears part of the cost he will be somewhat

more selective in making up his mailing lists. On the other hand, to require dealers to pay for promotional service means that every campaign is at the mercy of the willingness of distributors to pay for it. Yet it may be argued that the dealer who will not recognize the value of mail promotional work will not follow it up adequately, so that the manufacturer's expenditure would be wasted in any event. Taken as a general proposition, the matter seems to be about as broad as it is long. The choice of the proper policy depends on the circumstances of the particular case. These general conclusions seem to be in order:

1. It is not worth while to insist that distributors pay for mailings unless the fact of payment makes for better and more intelligent cooperation.
2. It is not advisable to charge the cost of mailings to dealers who agree to pay, and to furnish the service gratis to those who object to paying.

Training of Jobber Salesmen.—The manufacturer who complains that his distributors are not effective in selling his product often meets the retort that he has done nothing to educate the dealers' salesmen in how to sell the goods. More often than not this is a valid criticism. The principal reason why a manufacturer of industrial goods uses wholesalers is because he cannot afford the expense of direct contacts with users of his product. It seems reasonable that he should provide his distributors with as much information about the product and its markets as he would furnish his own field representatives if he dealt direct. Various plans are used for the education of jobbers' salesmen. Specialty men are often sent out. They may arrange meetings of jobbers' sales forces and impart group instruction covering such matters as applications of the products, the usual keymen in purchasing, and the sales arguments which have proved most effective. A manufacturer of electric drills and other tools sends out a specialty man with a large motor coach. At prearranged meetings he puts on sales talks and demonstrations to show jobbers' salesmen how to sell the line. In other cases manufacturers' specialty men visit customers with jobbers' salesmen and impart personal instruction. One danger which has sometimes arisen in such cases is that a lazy specialty man may ruin the morale of the men he is coaching.

In a few cases one or more salesmen from each jobber outlet have been brought together at company headquarters or at

branch offices. These meetings are addressed by company officials to arouse the enthusiastic goodwill of the group. Special instruction on the product and sales methods is given. Bringing jobbers' men to the plant or sales headquarters is effective in stimulating their interest in the company, but it is expensive, and, unless extremely well handled, is likely to result in nothing more than a delightful junket. The prevailing tendency seems to be to bring the instruction to the salesmen rather than the salesmen to the instruction.

Resale Activities.—Particularly in the case of products which are new to a particular market, sales promotion often means actual assistance to the jobber in selling the product. Missionary salesmen are rather commonly used in industrial selling. Almost universally their salaries and expenses are paid by the manufacturer. The orders they take are handled through the jobber, who receives his full discount on this business. The real justification for the use of missionary salesmen is that the average distributor is not well equipped to secure new customers for a product. His salesmen, carrying many lines, cannot devote very much time to aggressive presentation of any one. Nor, in spite of the manufacturer's educational efforts, can they expect to do so good a selling job as a man who specializes on the line. Hence the missionary salesman furnishes the answer to the problem of the manufacturer who cannot afford to sell direct, but who is dissatisfied with the volume resulting from the unsupported efforts of his jobbers. The condition which requires missionary work should be a temporary one. When buyers have had the product ably presented to them and the territory has been efficiently covered, the jobber should be able to go it alone. If he cannot, something is wrong with the product, the jobber, or the missionary job.

Most jobbers like missionary sales assistance. It means orders handed them on a silver platter. Herein lies one of the difficulties of the plan. If a manufacturer seems disposed to send out men to get the business and still pay the distributor his margin, the latter may refrain from exerting himself on the line. He may concentrate on lines where he receives no help. As time goes on, he accepts it as his due that the manufacturer should do his selling for him. Once this condition has arisen, the manufacturer must be careful in making a change.

The experience of the makers of S K F power transmission equipment along this line is interesting. Originally the company sent out missionary salesmen who secured orders for dealers' accounts. Proper follow-up and support was not forthcoming. The plan of having the company's men limit their calls to those made with distributors' salesmen was tried. It did not succeed because of the difficulty of matching time. The S K F man wanted to call only on prospects for his line. The distributor's salesmen wanted to follow his regular route. Finally a plan was adopted whereby the S K F salesman calls on the distributor and offers his services in handling prospects which have been developed to the closing point. This results in a logical and proper division of labor.

Sharing Missionary Sales Expense.—In some cases plans have been worked out whereby the distributor bears part of the expense of the manufacturer's missionary work, either through a reduction in his normal margin on orders secured in this way, or by a direct contribution of a proportion of salary and expenses. This arrangement is most likely to work out when the dealer has an exclusive franchise for a product which contributes an important part of his volume, where competition is keen and new buyers are constantly entering the market, and where sales of the product in question are usually made to customers who do not regularly purchase other items from the distributor. A large producer of paper towels tried this plan with certain of his jobbers. The manufacturer recruited and trained men to sell his product effectively. They were placed in jobbers' organizations, each paying 50 per cent of the cost. Where the men lacked ability or failed to adapt themselves to the jobber's organization, the plan failed. Where good men were used, the plan worked out well for a time, but ultimately the jobbers tended to take them over as regular full-line salesmen.

Handling Resale Orders.—When distributors have exclusive territories there are few complications in using missionary salesmen. Companies which follow a policy of intensive distribution, however, may encounter snags. Through what distributor shall an order obtained by the missionary be placed? The situation offers considerable possibility for favoritism. Even where every attempt at equitable distribution of such orders is made, suspicion and hard feeling may creep in. Probably the most satisfactory solution is to ask the buyer through

whom he would like the business handled, and in the absence of preference, to give the order to the nearest distributor. It is usually well to watch missionary salesmen closely to see that they are impartial in this respect. The problem perhaps arises more often than it should. In theory, an item which requires a considerable amount of missionary work is ordinarily more suited for exclusive agency arrangements than for general distribution through all available dealers.

Handling Inquiries.—A very important sales promotion service rendered by manufacturers to their dealers is the turning over of inquiries obtained by advertising in industrial publications. Distributors like this form of assistance. It gives them definite prospects to work on, obtained without the "cold canvass" which all salesmen dislike. However, it is usually advisable to do more than to hand inquiries over to the distributor. The sales promotion department should make sure that they are followed up promptly and efficiently. In a few cases a report on each prospect so furnished is required from the distributor. This is not as a rule an easy requirement to enforce. It is usually practicable, however, for the company's field representative (on his regular visits) to check up to see what progress has been made in handling inquiries. He should be provided with a list giving the date when each prospect was turned over to the dealer. From his reports, the promptness and effectiveness of dealer follow-up can be gauged.

The first step in handling an inquiry is to write the prospect in acknowledgment. He should be sent a catalogue or whatever descriptive material is available. If the inquiry is specific, all available technical data should be sent either direct to the prospect or to the jobber's salesman before the latter's first call. Promptness in following up inquiries is a paramount virtue. Unfortunately, in many cases the setting up of routines for handling such matters results in untoward delays. This is quite unnecessary. The object of routine handling of inquiries is to expedite their handling. When it slows the process, changes are clearly in order.

Surveying Dealers' Markets.—Distributors are ordinarily well informed on the local markets for products which they handle regularly. When they take on new items, or endeavor to sell old items in fields beyond their experience, their efforts seldom reach a maximum of effectiveness. In such cases the manu-

facturer may often very profitably undertake to survey the dealer's market for him, showing him where sales can be made. Such surveys mean more than copying lists of firms from trade directories. One concern selling a certain supply item sent a crew of field investigators into the territories of its distributors. They visited each name on certain trade lists, separated the worth-while prospects from those not so promising, and turned over excellent calling lists for the use of jobber salesmen. The method was effective, but rather too expensive. A more sensible approach is to tabulate the uses of the product, secure lists of firms which should use it, and qualify them by use of industrial directories or credit rating services. Particular attention should be given to the question of whether the prospect uses other products handled by the distributor. The latter may never have heard of selective selling but he has usually learned some of its lessons through experience. He has little regard for lists which contain names of many firms unable to buy enough to justify the expense of visiting them. A few attempts have been made to get distributors to conduct their own market analyses. While they have succeeded in a few isolated instances, the idea seems to hold little promise. The problem of directing dealers' efforts is rather closely related to that of guiding salesmen.

Service to Users.—The most important service rendered by the manufacturer of industrial goods to users of his product takes the form of technical advice and engineering assistance. One phase of this, engineering or design service rendered with a view to selling a specific product, is perhaps better classed as a part of the straight sales job. But much technical work is done on a purely promotional basis. For instance, many material manufacturers solicit inquiries as to possible applications for their products. Frequently, these involve rather large expenditures for research and development work. The use of engineering service is such an important factor in industrial marketing that the subject is handled in a separate chapter (see Chap. XI).

Stimulation of Customers' Markets.—Another service rendered by some manufacturers of materials to their customers is the stimulation of the resale of the latter's products. The DuPont Company, for instance, sells large quantities of celluloid to makers of advertising novelties. It advertises to business men who might use such goods, often featuring certain products made

by its customers. This advertising seeks to stimulate inquiries, which are turned over to DuPont customers and indirectly serve to expand DuPont sales. Somewhat the same policy is followed by the Bakelite Company in promoting the sale of phenol plastic molding powder. An interesting example of promoting sales of a customer's product was furnished recently by a certain steel company which delegated an employee to demonstrate to its executives and working forces an automobile made by a manufacturer who purchased its steel. This illustrates a new form of reciprocity.

Sales Correspondence.—Where a considerable amount of attention is given to the work of sales promotion, it may be found helpful to organize a small staff specifically charged with the duty of handling sales correspondence. A fairly wide gap exists between the type of customer contact provided by the salesman on his periodic visits and that afforded by the mailing of circulars and broadsides. This gap may be bridged by properly timed letters which are dictated for the individual customer. Such prosaic mailing pieces as reprints of advertisements or folders announcing new products always receive vastly more consideration when accompanied by individualized sales letters. Such letters could be written by salesmen, except that generally they can find no time, they cannot express themselves sufficiently well on paper, and they do not like this type of work. The sales correspondent should be chosen for his demonstrated aptitude for this type of work. In many organizations he will be found doing routine work in the sales, credit, or purchasing departments. He must be equipped with a complete and up-to-date knowledge of each of the concerns to which he is to write. Routing salesmen's reports to him is desirable. Of great assistance is a file which contains as complete information as possible about all past dealings with the customer. In companies selling machinery, a complete history of each piece of equipment in the customer's plant is very helpful. In fact, it would seem that sales correspondence should assume a place of particular importance in the selling of industrial machinery. Purchasing is rather infrequent in most lines. Keeping in touch with customers and prospects by regular personal visits exclusively runs into a considerable sum when buyers are in the market only once in five or ten years. Yet most sellers dare not assume that the buyer will get in touch with them when the time comes to purchase. A

capable campaign of sales correspondence may materially reduce the cost of maintaining customer contacts in this thin market.

In many industrial markets the salesman acts merely as a traveling agent of the manufacturer whose duty it is to see that relations are kept cordial and proper service is rendered. He seldom writes an order. They are sent in by mail. In such cases a sales correspondence division may very well be given the routine job of acknowledging orders and handling correspondence on adjustments, credits, and similar matters. The banality of most business correspondence is commonly overlooked. Concerns which spend thousands of dollars in advertising so that their customers will not forget them might do well to consider the possibility of making an impression, at little or no cost, by distinctiveness in routine correspondence.

Sampling.--Samples play a big part in industrial selling. Purchasing agents and officials who influence buying always like to see and examine the products they are asked to buy. In the case of a new raw or process material, the sale may depend on satisfactory performance of sample shipments under conditions of actual operation. Machinery can usually be sampled only by making a trial installation. Arrangements for this large-scale sampling are usually handled by the regular sales force.

The ingenuity of the sales promotion department has a real opportunity in the fields of fabricating materials and parts and operating supplies. Most industrial buyers are rather slow to consider changes in these lines unless the virtues of the would-be seller's product can be tangibly demonstrated. It must be remembered that purchasing officials receive a great many samples. The problem is a dual one: first, to get attention, then to convince. A dramatic element helps to win attention. The National Lead Company sampled its Dutch Boy Red Lead by sending to purchasing agents a box containing a tiny can of the lead and an unfinished steel saucer. The recipient was invited to test the product by painting one half of the saucer with Dutch Boy and the other half with any other brand of red lead, and then subjecting it to an aging test. Probably the actual number of buyers trying the test was small, but the sample and the proposal no doubt convinced many of the sincerity of the company's claim. In bringing out a new line of wing nuts, the Parker-Kalon Corporation feared that so simple an item would

receive little attention if sampled. They mounted a set of samples on a black card, set the card in a small black and silver box, and printed detailed facts and specifications on the outside and inside cover. The package could not fail to win attention.

Sampling may be used, not only to introduce a product, but to drive home a talking point. In 1928 the Rockbestos Products Corporation introduced a new asbestos-insulated wire for panel boards. The chief talking point was that the wire did not crack when bent. Samples were sent to electrical engineers in industry and to plant electricians. The accompanying letter invited a test. Psychologically the plan is ideal. Every human instinct demands that the test be tried. Its success results in a degree of conviction far greater than could be attained by hours of a salesman's arguments.

An interesting example of sales promotion through an indirect kind of sampling is furnished by the International Nickel Company. One of the company's major aims is to stimulate the sale of monel metal to fabricators of household and industrial equipment. In trying to interest makers of household appliances the objection was made that the product was of value but that people would not pay for it. The company thereupon brought out a line of monel metal sinks, advertised extensively, and proved that they could be sold. It has now undertaken to produce and market a monel hot-water tank. The primary reason for spending so much effort and money on the household market is to make monel metal familiar to industrial executives through its use in the kitchens of their homes. It expects by this indirect sampling process to lay the foundation for favorable action when the question of the use of monel comes up in the businesses of these executives.

Exhibits and Trade Shows.—A means of sales promotion that is very common in industrial marketing is the exhibition of products in trade shows. Exhibits are frequently held in connection with annual meetings of trade associations or professional societies. Manufacturers rent space to display their products. Booths are maintained, with salesmen or promotion men in attendance to answer inquiries or to develop prospects. Catalogues, booklets, and folders are distributed. Names of visitors are recorded and subsequently followed up by direct-mail advertising. A trade show usually means a period of feverish activity for the sales promotion department. Arrangements

must be made for space, the exhibit must be planned, special models, signs, etc., must be prepared. All the material must be properly packed and shipped. On arrival it must be unpacked, checked, and erected, usually in a very short period. Then there is the grueling job of remaining in attendance at the company booth. Finally, the exhibit over, materials are knocked down, packed, and shipped home, leaving nothing to do but audit and approve bills and arrange for follow-ups of prospects secured.

According to a study conducted by G. W. Morrison and J. H. McDonald, in 1929, 177 companies with sales of \$1,576,500,000 spent \$1,065,000 on convention exhibits. This seems a small amount, but actually it represents about 4 per cent of the total appropriations of these companies for all forms of advertising and sales promotion.

Trade shows sometimes constitute a difficult problem for manufacturers of industrial goods, particularly those whose products are sold in several industries. In many cases the trade show is used as a means of augmenting the income of trade associations. Manufacturers may find themselves solicited by groups of customers to take part in shows, the real motive of the trade group being to secure a contribution. A concern which refuses to buy space may find itself subjected to unfavorable comparison with a competitor who does. Yet a reasonable distribution of the amount available for promotion precludes taking space in all the various national, sectional, and local shows held. In many industries exhibitors have united to assume a measure of control over such shows. A report published by the Policyholders' Service Bureau of the Metropolitan Life Insurance Company indicates that the following measures of exhibitor control are most prevalent.¹

1. Creation of a board or committee actually to manage the show, or with authority to say what shows shall be recommended to members of the association.
2. Longer intervals between shows—changing frequency from semi-annual to annual, annual to biennial, etc.
3. Discontinuance of regional shows competitive with the national.
4. Bringing together of two or more industries in one show.
5. Use of exclusion clauses closing the national show to exhibitors participating in other shows without the approval of the national show committee.

¹ Reprinted by permission from *How Exhibitors Are Meeting the Trade Show Problem*, Policyholders Service Bureau, Metropolitan Life Insurance Company.

6. Permanent exhibits to take the place of periodical exhibits.
7. Opening of exhibition committees to representatives of allied trades, with equal voice in determination of policies and plans for shows.
8. Equalization of exhibition space; all exhibitors limited to same amount of space.
9. Rules limiting entertainment.
10. Other methods suggested or tried—holding of show separate from convention, and A. B. C. for Trade Shows.

A few industry groups have undertaken to set up exhibitors' committees or boards which pass on proposed exhibitions. The most potent of these is the Exhibitors Committee, Industrial and Power Shows, Inc. This body includes among its 700 members representatives of many industrial marketing groups. Its function is to investigate proposed shows and report facts concerning them to members. The investigation is conducted by the following questionnaire¹ which is sent to the sponsors:

1. a. What organization or interest is promoting the exhibition?
b. What are its financial resources?
c. Who are its officers?
2. a. What civic, industrial, engineering or other associations are supporting it?
b. What is the name and address of the secretary of each such association?
3. What association is holding a convention or meeting coincident with the exhibition?
4. a. Has the association formally asked that this exhibition be held?
b. If not, does it favor the holding of the exhibition?
5. Will the association meeting extend over the same, or over a greater or lesser period than the exhibition?
6. a. Are meetings to be held in the same building as the exhibition?
b. If not, what is the distance between exhibition and meeting buildings?

REASONS FOR HOLDING

7. If no association meetings are to be held, why is the exhibition proposed?
8. Approximately what amount of money will be spent for advertising the exhibition and what classes of publicity will be purchased?
9. What newspapers and business journals will give support in the way of free publicity?
10. What disposition will be made of income in excess of actual operating expenses?
11. From what industries are exhibits to be sought?

¹ Reprinted by permission from *How Exhibitors Are Meeting the Trade Show Problem*, Policyholders Service Bureau, Metropolitan Life Insurance Company.

ATTENDANCE

12. From what normal geographic territory is attendance anticipated?
13. What volume of gross attendance is anticipated?
14. What classes of visitors are to be solicited to attend?
15.
 - a. Will an admission fee be charged?
 - b. If not, how will attendance be regulated?
16. Will personal registration or other method of recording visitors be operated?
17. Will such attendance registration be available to exhibitors?

COST

18. What will be the basic scale of charges for exhibit space?
19. What services and privileges are included for those charges?
20. What will be the scale of charges for:
 - a. Transporting exhibits from freight terminal to exhibition building.
 - b. If any, for handling exhibits from sidewalk to exhibit space.
 - c. If any, for handling exhibits from exhibit spaces to shipping platform.
 - d. Transporting exhibits from exhibition building to freight terminal?
21. To what extent will exhibition management cooperate with exhibitors in the matter of labor and materials charged for:
 - a. Electric wiring installation.
 - b. Pipe connections.
 - c. Carpenter work.
 - d. Handling of exhibits.
 - e. Booth fittings.
 - f. Signs.
 - g. Decorations.
 - h. Furniture.
 - i. Furnishing information to exhibitors prior to exhibit on these points.
22. What will be the charges for furnishing exhibitors with registration or visitors attendance records?

ARRANGEMENTS

23. Does the promoting organization intend to execute a bond guaranteeing proper performance of its contractual obligations to exhibitors?
24. How many floors will be devoted to exhibits?
25. What is the total exhibiting space on each floor?
26. By what system will space be allotted to applicants?
27. How many hours prior to official opening hour (excluding Saturday afternoon, Sunday, holidays and nights) will exhibitors be given for erection and placement of exhibits?
28. How many hours subsequent to official closing (excluding Saturday afternoon, Sunday, holidays and nights) will be given exhibitors for removing exhibits, without charge for rent or storage?

29. To what extent is the exhibition management committed to trade unions in the matter of labor to be employed by exhibitors?
30. Will exhibitors be permitted to employ their own labor for the handling and/or creation of their exhibits?

Such activities fill a real need in making it possible for manufacturers to judge, without prohibitive expense, just how valuable a specific trade show will be as a means of sales promotion.

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CHAPTER XI

ENGINEERING SERVICE

One of the most potent instrumentalities for promoting sales and retaining the good will of customers in the industrial market is the rendering of technical service by the seller to the buyer. The problem of service appears in many guises. In one form or another it is used to stimulate the sale of all kinds of industrial goods except primary raw materials. How to use engineering service with maximum effectiveness and how to keep its cost in a proper relationship to sales volume and profit are problems which confront most of the large and many of the small manufacturers operating in this field.

Types of Engineering Service.—Engineering service can well be divided into two phases, according to whether it is rendered in anticipation of, or subsequent to, a sale. The type of service rendered prior to a sale usually involves an analysis of the customer's operating problems, the making of plant or process surveys, time studies, and the like; and the preparation of recommendations which may embody plans, designs, or formulae. Subsequent to the sale we are likely to find the seller furnishing such services as installing equipment and demonstrating it; training operators; "trouble shooting"; repair work during a specified guarantee period (and often long afterward); and periodic inspection. Particularly in the case of major equipment there is the obligation to maintain stocks of repair parts and to have trained men available at all times to render emergency service in case of breakdown.

Major Equipment.—Engineering service covers a wide range. Its character and extent differ with the nature of the product being sold. Most manufacturers of heavy machinery are prepared to send engineering representatives to the plants of prospective customers. These men study the production problems involved, note the limitations imposed by existing equipment, nature of the process, specifications for the product, available space, and so on. Armed with this data, they or their

engineers at the machine manufacturer's plant proceed to design either a new machine or alterations to a standard machine to fit the customer's requirements. A report with recommendations is rendered to the customer. This report may even go so far afield as to recommend changes in the prospect's process or product to permit most advantageous use of the proposed equipment. Manufacturers of packaging machinery frequently design packages for prospective customers. If the sale is made, the manufacturer may send an engineer and perhaps a crew of mechanics to install the machine and put it in shape for operating. If its use is at all complicated, he is likely to send out a demonstrator to instruct the customer's operatives in the use and upkeep of the machine. He may keep an engineer on the job to see that a guarantee of performance during a specified period is met. Shipbuilding concerns send out a "guarantee engineer" on the job for six months after delivery to instruct the crew and to direct necessary repairs and adjustments during this test period. Often repair service is rendered by the manufacturer during a considerably longer period than the guarantee covers. Another service which may be rendered by the machinery manufacturer is that of periodic inspection to insure satisfactory performance. In some cases this may be done during the entire life of the equipment.

Accessory Equipment.—With accessory equipment, technical service prior to a sale is largely a matter of adapting the use of standardized equipment to the problems of the user. A common procedure is to send an expert in the use of the equipment to make a study of the prospect's plant, office, or store processes or routines. A manufacturer of office equipment, for instance, may study the handling of orders, billings, and accounts in a prospective customer's office, and submit a report which recommends an improved system and indicates what items of equipment should be purchased to secure the desired result. Here again periodic inspection and adjustment service may be rendered, with or without compensation from the customer.

Parts and Materials.—In the case of fabricating parts, service rendered by the seller usually takes the form of creating designs, either for the part or for the product itself. The manufacturer of automobile accessories may design a radiator front in order to interest the automobile producer in his horn or headlamps. Package design service is almost universally rendered by manu-

facturers of containers and wrapping materials. The service rendered by material manufacturers often involves research work to develop materials suited for specific purposes. This may lead to lengthy and expensive laboratory and process tests to which the vendor's engineers devote much time. Another phase of technical service in this field is the selection of material shipped to the individual customer. Chemical wood pulp, for instance, cannot be produced so that every batch is absolutely identical with every other batch. It could be made more uniform by a process of blending. However, every paper mill has its own equipment, its own process, and its own standards for the paper it produces. A mill with limited beating capacity cannot operate successfully with a pulp which requires many hours of hard beating. A mill which specializes in absorbent papers can best use a pulp with certain definite characteristics. A pulp manufacturer with many customers can render a highly valuable service by sending his technical men to study the equipment, process, and product of each customer, and then by arranging to ship him the kind of pulp which is particularly suited to his requirements. Another service rendered by most producers of materials is to send out technical men to investigate process troubles of customers, whether or not their materials are involved. A sugar refiner investigated to learn why he had for a long time received no orders from a large customer, a manufacturer of ginger ale. It developed that the latter had encountered difficulty in his new plant. Batch after batch of ginger ale went bad. The sugar refiner sent out a chemist who speedily found the trouble. The plant had formerly been used as a brewery, and yeast colonies still persisted in some of the pipes. The trouble was speedily corrected and the ginger-ale manufacturer again began to buy sugar.

Operating Supplies.—Even in the case of operating supplies a great deal of engineering service is rendered by suppliers. This usually takes the form of inspection of the plant or equipment of the prospective customer, with recommendation as to methods of upkeep. Certain oil companies maintain large staffs of engineers who survey prospective customers' lubrication requirements and submit detailed reports specifying the type and amount of oil to be used on each bearing surface and laying out complete oiling schedules. Similarly the DuPont Paint Prescription Service makes studies and develops detailed schedules for plant

maintenance painting. Naturally such services are rendered only to those organizations whose potential purchases are sufficiently large to justify the cost.

Reasons for Engineering Service.—The real reason for the importance of engineering service in industrial marketing is that the requirements of buyers are highly individualized. A contributing factor is the frequency of technological change in machinery, processes, and products. This necessitates engineering control of design, composition, or application in order to coordinate what the producer makes with what the buyer needs. Can this process of coordination or adaptation be performed best by the seller or by the purchaser? The vendor's engineers specialize and become adept in the solution of a few specific types of problems under varying conditions. The buyer's engineers usually cover a wider range of problems, but know less about any specific problem than do the well-trained and competent representatives of sellers in that line. A production engineer in the employ of a metal-parts manufacturer may know that he can machine a certain article on a milling machine, a planer, or a disk grinder. When it comes to the specific performance of each machine he is very likely to have to rely on the sales engineers employed by the various machine manufacturers.

Advantages to the Seller.—The seller of industrial goods usually feels that it is distinctly to his advantage to render engineering service to prospective customers. It is an effective means of promoting sales. The character of the entree is improved. A salesman may never get beyond the purchasing agent, whereas an engineer usually has access to the men who actually make the purchasing decisions. Engineering service, moreover, tends to remove the buyer's emphasis on price. It affords a basis for judging value by other measures than the dollars and cents of initial cost.

Advantages to the Buyer.—Many buyers of industrial goods have come to rely heavily on the engineering service provided by vendors. Only the largest of industrial organizations can afford to maintain sufficiently large and experienced staffs to handle all their engineering problems. Concerns of small or medium size must depend for engineering data and advice either on vendors or on outside consulting engineers. Often they cannot afford to incur the expense of retaining competent consultants. In any event, the consulting engineer is likely to

rely to a considerable degree on the advice of vendors, merely serving as a judge to evaluate the contentions of engineers representing several manufacturers of the article in question.

Sales Engineer a Professional Witness.—When the buyer relies on the engineering advice of the vendor, he is, of course, getting biased advice. The sales engineer cannot have a judicial point of view. He is a professional witness, retained by the seller, and having the seller's rather than the buyer's interests at heart. If he is conscientious and competent, he will not recommend his product in cases where it is clearly not suitable. Yet where the choice is close, he may in perfect honesty of intention recommend a purchase which is not the best from the buyer's point of view.

Problems of the Manufacturer.—The manufacturer who employs technical service as a means of sales promotion finds that the practice involves him in several problems. It is expensive. Not only is the direct cost high, but the seller, having taken the responsibility of advising what the buyer shall use, finds himself also expected to assume a considerable measure of responsibility for the satisfactory performance of what he has sold. This may involve a great deal, depending on the customer's notion of what constitutes proper performance. In discussions of the high cost of engineering service, sight is often lost of the extent to which the seller virtually obligates himself when he renders presale advice to the buyer. It seems, however, to be pretty clearly established as the job of the seller of industrial goods to consider and to adapt his product to the individual needs of each customer. Essentially he is selling new ideas and improved methods. If he wishes to overcome the average business man's inertia toward change, he must assume the burden of proof. When he does this, however, he is likely to place himself in direct competition with the consulting engineer. In fields where the consulting profession is strong, it may be inadvisable to go too far in extending free engineering advice to the user of equipment or materials. Other things being substantially equal, consultants will usually favor those manufacturers who do not threaten their position.

Balancing Cost against Probable Results.—The cost of engineering work performed in anticipation of a sale is often considerable. The Carrier Engineering Corporation finds that an estimate costs, on the average, about \$500. Since prospective purchasers of industrial goods quite commonly invite proposals from

at least two or three vendors, it is obvious that much of the preliminary engineering work done cannot result in sales. This raises the question as to how the manufacturer providing the service is to get his money back. Certainly he must see to it that his ratio of sales to proposals is as high as possible. This means a careful selection of the prospective purchasers for whom such work is done. In the first place, it should be ascertained that the customer's probable order will bear a reasonable relationship to the cost of the preliminary work. This presents a difficult problem. It is hard to calculate at the beginning of an engineering survey how much it will cost, or what sales possibilities it will uncover. Nevertheless, there should be a balancing of the odds before starting. The size of the prospect's production is usually an important factor. The state of his finances is clearly important. Another point to be settled is whether the person requesting the service is really influential in the making of purchasing decisions. A personal contact often helps in deciding whether service should be extended, and how much, and on what basis.

Abuses of Engineering Service.—There are various types of abuse of engineering service rendered in anticipation of a sale. They must be guarded against. They are most clearly recognized and most important in the machinery field, but they also exist in other instances. The first is the problem presented by the buyer who has no serious intention of purchasing. Perhaps a casual interest leads him to ask for a survey, without realization of the cost involved. Perhaps his ethical standards do not guide him to the conclusion that the concern rendering such service is at least entitled to a "run for its money." Responsibility for this type of abuse must frequently rest upon sellers. Sales representatives sometimes encourage requests for service without qualifying the prospect as a potential purchaser. The broadcast offer of technical service in trade paper advertising may have the same effect.

Design Piracy.—Another type of abuse is clearly indefensible. It consists of a buyer seeking technical service and appropriating the advice without recompense. He may have a machinery manufacturer design a special machine for him and then use the plans to have it made in his own shop. He may induce a box manufacturer to design a package and take the design to a competitor, who, freed from the cost of creative work, can quote a lower price. The only defense against this sheer piracy is to

refrain from turning over blueprints, samples, plans, or formulae until an order is placed. In a few cases manufacturers make a charge for such design work, crediting the amount against the order, if it is subsequently placed.

Duplication of Service.—Almost as vicious in effect, if not in intention, is the practice followed by some buyers of sending out broadcast requests for engineering advice to fifteen or twenty concerns with the object of playing one against another to reduce the price. The ultimate result is to place upon the industry as a whole an uneconomic burden of expense.

Incidence of Service Costs.—By the very nature of things a considerable amount of preliminary engineering service must be rendered in cases where no sale results, or where the profit on the sale does not fully cover the cost of the service. This raises the question as to how such service should be paid for. The common practice is for the seller to render the service without charge as a means of sales promotion, and to carry the cost into his sales overhead. The cost of the service is reflected in the price which he sets and each purchaser bears a share of the expense proportionate to the size of his purchase. The costs of unproductive service fall upon those who do buy. John P. Ferris, in a paper appearing in *Mechanical Engineering* for June, 1930, cites a case in which the total cost of engineering on special estimates and proposals was approximately 4 per cent of the total sales made during the period covered. Only one-tenth of this expense, however, was incurred on jobs which were ordered within the succeeding year. In this case the average concern which purchased equipment presumably bore ten times the engineering expense actually involved in selling it. Furthermore, under such a plan the purchaser who requires little or no service pays the bill for the buyer who gets an amount of service which is disproportionate to the size of his purchase. Sometimes a concern makes two or more lines of product, on only one of which service must be given. If service costs are charged to general sales overhead, the product which requires no service is likely to be overpriced and the other underpriced. This may lead to difficulty in meeting competitive prices on the product which is sold without service.

Charging for Engineering Service.—Such situations as these have led to suggestions from both buyers and sellers that a charge be made for preliminary engineering service. This might take

the form of a fee agreed upon in advance, or it might be handled on a basis of actual cost. The recipient of the service would be billed whether or not he made a purchase. An alternative method is to include in the quotation made to a prospective customer the engineering cost involved in preparing the proposal. This would not solve the problem of the concern which gets service but does not buy. It would result in apportioning the cost among buyers on the basis of the amount of service required by each.

Objections to a Specific Charge.—There are many objections to making a specific charge for engineering service, equitable as it may appear. In the first place, the sales promotion value of such service would be destroyed. The prospective buyer will not obligate himself to pay for engineering work until he has decided he wishes to purchase. The initiative thus passes from seller to buyer. This would unquestionably delay sales. Another objection is that, in spite of their cost, these technical surveys often benefit the seller fully as much as the buyer. The engineer who is sent into a customer's plant often brings back valuable ideas for new uses or for improvements in the product. Experience in solving problems in one plant, even though the individual transaction is unprofitable, may prove to be of great value in making other sales in the same industry. The manufacturer who uses engineering service as part of his sales strategy is really speculating on his ability to demonstrate to prospective customers that they can benefit by purchasing his product. It is hard to see how he can fairly ask the customer to bear this risk. If the cost to the seller becomes unreasonably high, the proper solution would appear to be to exercise more care in selecting the recipients of his service, and thus improving his odds.

Service Subsequent to the Sale.—A somewhat different situation exists with regard to engineering service rendered subsequent to the sale. When a piece of machinery requires the services of an erecting engineer or of mechanics for its installation, the cost is as directly a part of the individual transaction as is the cost of transportation. It is immaterial whether it be charged to the customer as a separate item or whether it be included in a lump-sum quotation for the machine delivered and installed. There is some advantage to the seller in making a per diem charge for the services of his employees, as under this arrangement the buyer is usually interested in expediting the work. This seems to be the most common method of handling installation service.

Demonstration Service.—In a broad sense, the seller of industrial machinery or materials must consider that he has sold, not the product itself, but the advantages achieved by its satisfactory performance. To insure proper performance, the buyer's employees must often be given special training. In many cases only the seller is equipped to do this. It is a common practice for machinery manufacturers to send out demonstrators to instruct operatives in the use of machines sold. There is a decided variance in methods of charging for such services. Sometimes a per diem charge is made. In other cases the cost is borne by the seller, and charged to general sales overhead. In the latter case there often develops a tendency for the buyer to seek to retain the demonstrator for an unreasonably long period. This tendency develops even when a man is loaned for a definitely specified period. A delicate problem of balancing the burden of cost against the danger of disturbing friendly customer relations may result. Where substantial future sales are in prospect it may be good business to allow the customer to retain a demonstrator as long as he wishes. The method followed by the Lincoln Electric Company, manufacturer of welding equipment, has the advantage of avoiding this difficulty. This company maintains a training school for welding-equipment operators. No charge is made for instruction, but customers bear the traveling expenses and salaries of their employees who are sent to the school. On satisfactory completion of the course, certificates are awarded.

Performance Guarantees and Repair Service.—A company which sells equipment or materials under a guarantee of performance must back up that guarantee or lose its reputation. In the long run it is probably most satisfactory and least expensive to send a service man to iron out the initial difficulties and to remain on the job until the guaranteed performance has been attained. A troublesome problem often arises in connection with repair service required after the expiration of the guarantee period or in cases where the difficulty is due to the customer's neglect or abuse of the product. Service policies in this respect vary from extremely liberal to very close. Many companies follow the policy of rendering the necessary service, billing the customer, and refraining from trying too aggressively to collect the account if the customer objects. Some unscrupulous buyers take advantage of this easygoing policy to obtain free

repair and upkeep service during practically the entire life of the equipment. This is possible largely because there is little tendency to segregate service costs. Makers of large and expensive machines often maintain card or folder records covering each installation. Such records can quickly reveal which customers abuse the service privilege. Where detailed records of this sort are not feasible, it would seem to be sound practice to accumulate service costs by individual customer accounts. This paves the way for special handling of accounts made unprofitable by excessive costs. As in every phase of business activity, the practice of lumping costs conceals much avoidable waste.

Periodic Inspection.—A phase of technical service which is usually of great value to buyer and seller alike is the maintenance of a corps of service men who periodically visit buyers' establishments to make sure that the product is rendering satisfactory service. In some cases the regular sales force can undertake this job; in other instances it is better to segregate it. Such periodic follow-up calls usually create considerable good will. They often anticipate complaints which would necessitate expensive special visits. These contact men can readily iron out discrepancies between customers' needs and practices of the vendor's plant. They should be able to make simple repairs and adjustments, and thus help the customer to get better results from his purchase. One of the greatest advantages to the seller is the contact thus established with the men in the shop and the ability to sell the product from the bottom of the customer's organization. Another very real advantage is the picking up of ideas for new applications, new products, or improvements in the present product. Effective merchandising depends on an intimate knowledge of customers' problems. Periodic inspection service can be utilized to secure this knowledge.

Organizing the Engineering Service.—It is sometimes difficult to decide how the internal organization of engineering service work should be handled. In small companies, and in not a few large ones, the work is handled by men from the plant production or engineering departments. In some cases this works out successfully. Frequently, however, plant men are too strongly imbued with the production point of view and do not give sufficient attention to the application of the product to the user's needs. Sales and operating departments are not always in harmonious coordination. The sending of operating men to

contact customers may lead to crossed wires between the two departments. Engineers concerned primarily with design work do not always make the best of impressions in customer contacts. As a class they tend to dig too deeply into the technical aspects of the problem, ignoring the sales point of view which should permeate all service work. Of course, where men with the proper point of view can be found within the operating organization, these objections do not hold.

Salesmen or Engineers?—Another question which arises is how far salesmen should be trained to handle technical problems. Is it better to use a single force of sales engineers, or to use salesmen backed up by one or more men with a very high degree of technical training? This is largely a matter of the complexity of the engineering problems involved. Men who combine a high degree of sales ability with high engineering skill are rare. If engineering problems are complex, it may be better to have separate men handle the two jobs. Care must be taken, when this is done, to see that customer relations are not disturbed by the dual contacts. The Ingersoll Milling Machine Company handles this problem by developing sales representatives whose primary job is selling, but who have sufficient technical training to comprehend customers' problems. The salesman collects data which cover the customer's needs in comprehensive fashion. He submits his report to the central engineering department, which prepares a proposal, or alternative proposals. The sales representative then returns to the customer with a complete and detailed solution.

Coordination.—With regard to installation, demonstration, inspection, repair, and adjustment service, it is usually sound practice to deal with the customer through a single sales representative. He should arrange for the visits of special technical service men. Otherwise there is a lack of coordination which is likely to impress the customer unfavorably. A possible difficulty is that the salesman may be too much inclined to see the customer's viewpoint, and thus be overliberal in committing the company to the rendering of service. It should be possible to check this tendency by effective sales management.

Engineering Service in Secondary Markets.—An increasingly important phase of this whole problem is the rendering of engineering service to the customer's customer. The Hyatt Roller Bearing Company, for instance, faced the problem of

selling its bearings to machinery manufacturers. This primary market could not be effectively developed until a demand could be created in the secondary market, among machinery users. The company therefore sent out expert bearing engineers to get in touch with manufacturers in ten selected major industries. These men worked out applications of bearings in the plants of these manufacturers and induced the latter to specify Hyatt bearings in the machines they purchased. They then worked with the manufacturers of machinery to help them to meet the demand thus created.

This extension of technical assistance to the ultimate industrial user is of particular importance when new processes, parts, and materials are being introduced to the market. It is quite common practice for manufacturers of such goods to advertise in the trade and technical press, soliciting problems which their research men and engineers may attack. The intermediate manufacturer is seldom willing to take the responsibility for sponsoring innovations. Engineering, as well as sales and advertising effort, must be applied to the user if a substantial demand is to be created for a new product.

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CHAPTER XII

INDUSTRIAL ADVERTISING

Advertising a Selling Tool.—In the industrial field, advertising is primarily a tool used to facilitate the selling process. Its use as the sole means of effecting sales is infrequent and unimportant. The nature of industrial marketing is such (see Chap. II) that personal contact between representatives of buyer and seller is frequently essential for the consummation of a transaction. The most important objective of industrial advertising is, therefore, to increase the effectiveness of salesmen's activities. It can do this in several ways.

To Secure Inquiries.—In many industrial markets it is difficult for a manufacturer, particularly if he is new to the field, to secure good lists of prospects. If purchases are made at infrequent and irregular intervals, it is hard to forecast when a prospect is in the market. To place sole reliance on personal sales contacts means a great deal of "cold turkey" canvassing. Using salesmen to find prospects is an expensive procedure. By using the proper kind of advertising, a manufacturer can often secure inquiries from people who are interested, and use his salesmen for selling, rather than for prospect hunting. This plan does not afford complete coverage but it often provides contact with a sufficient segment of the market to insure profitable operation. Because the salesman's time is not wasted in getting in touch with nonprospects or with prospects who are out of the market, selling cost is considerably reduced.

To Pave the Way for Salesmen.—It is pretty definitely established that the salesman representing a concern which advertises consistently finds it easier to secure a satisfactory initial interview with the buyer. The salesmen of many companies which do not advertise are, of course, well and favorably received by purchasing agents in the industries they regularly serve. However, in several cases where such companies have entered new fields there has been a decided difference in the reception which their salesmen have encountered. In cases where new buyers

are continually entering the market, this point is also of considerable importance. Similarly, a salesman supported by consistent advertising can usually make greater progress in his initial interview with a buyer. The advertising eliminates the need of explaining his company's position in its industry, its reliability, and its general policies. Thus the salesman can more quickly get down to the business of selling his goods.

To Increase Frequency of Contact.—There is a definite economic limit to the frequency with which personal visits can be made to any industrial account. Proper advertising can assist greatly in maintaining contacts with customers during the intervals between salesmen's visits. "Keeping one's name before buyers" is seldom sufficient as the sole justification for an advertising program. Nevertheless an undeniable advantage accrues to the consistent advertiser whose customers and prospects receive his sales messages in the intervals between salesmen's visits. The benefits of reiteration in convincing prospective buyers have been amply demonstrated in the marketing of many types of consumer goods. There is no reason to believe that the same principle does not hold true in industrial marketing.

To Reach Keymen.—It is characteristic of most industrial goods that several men in the buyer's organization participate in making decisions as to whether to buy and what to buy. It is often difficult to determine exactly who are the keymen in a particular account. Even when they can be located, it may be difficult or impossible for the salesman to reach all of them. Failure of the seller to get his story to one of these keymen often blocks a sale. Advertising can often reach these men and exert sufficient influence so that they will accept recommendations from the men with whom the salesman has been in touch.

To Gain Prestige.—Industrial advertising sometimes has other objectives of considerable importance. A company which advertises consistently secures a certain measure of prestige. This draws to it able salesmen, agents, and distributors. It also tends to attract young men of promise who are interested in entering the industry. The well-known company invariably has first choice among the young men who graduate each year from colleges, universities, and technical schools. The prestige built by consistent advertising is likely to be particularly potent with the concerns of small and medium size which purchase certain items less frequently than do large companies. Often unable to

evaluate in any other way the ability of competing suppliers to serve them, they are likely to turn to the leading advertisers in the field.

To Check or Emphasize Salesmen's Stories.—Salesmen operating without direct supervision cannot always be depended upon to present a company's sales story completely and in the exact way which sales officials desire. Through its advertising the company may announce new developments or set forth sales arguments in exactly the way it wants. This minimizes the effect of the salesman's forgetfulness or ineptitude. This point is of particular importance in those fields where the small unit of sale makes it necessary to employ salesmen whose calibre is not too high.

To Seek New Markets.—To an increasing extent companies serving the industrial market are using advertising as a means of "scouting" for new uses for their products. A manufacturer of steel stampings proclaims the advantages of stamped over cast parts. Inquiries are sought from makers of metal products, and the advertiser's development engineers are given an opportunity to work in fertile fields. Producers of alloy steel, aluminum, plastic molding compounds, parchment paper, and many other commodities follow the same practice.

To Broaden Existing Markets.—While industrial markets themselves are, as a rule, inelastic, it is frequently possible to broaden the demand for materials and parts by widening the market among consumers for the products into which they are fabricated. Thus one very important phase of industrial advertising is "collateral" advertising to consumers or to secondary industrial users. Thus the Hercules Powder Company advertises the advantages of lacquer finishes in order to be able to sell more pyroxylin to lacquer manufacturers. General Mills and Standard Brands advertise the virtues of baker's bread in order to sell more flour and yeast and baking powder to bakers. The American Rolling Mills Company seeks to broaden and consolidate its position as a supplier of sheet steel by advertising to the public the advantages of Armco Ingots Iron.

To Broaden Security Markets.—Still other objectives are sometimes sought by companies serving the industrial market. Concerns which are likely from time to time to require new capital occasionally find it advantageous to spend money for institutional advertising to reach potential investors who would otherwise

have no knowledge of them. Companies which advertise extensively generally enjoy broader markets for their securities and this makes new financing easier. Some companies find that their activities are continually leading them into new fields. Broad programs of institutional advertising may help materially in securing ready acceptance for their products.

Advertising Supplements Personal Selling.—The primary purpose of industrial advertising, however, is to help the salesman to secure orders. Advertising can tell a standardized story. In the industrial field, the existence of numerous trade papers permits the telling of different stories to several groups of prospects in terms of their own group interests. There are "vertical" media, each of which covers its own industry from top to bottom. There are "horizontal" media, each of which covers a group of executives or subexecutives with common professional or functional interests. The use of direct mail permits more minute subdivision of the entire market. But fundamentally, advertising tells the same story to each member of a relatively large group. Personal selling, on the other hand, reaches the individual in terms of his own specific interests. Furthermore, there is a definite limit to the amount of selling argument which can be compressed into one or a series of advertisements. The salesman's period of contact is decidedly longer. It is extremely important to effect a proper coordination and balance between the use of salesmen and the use of advertising. Too little personal selling nullifies advertising expenditures. Too little advertising increases the burden on the salesman and makes the total selling cost unnecessarily high.

Need for a Coordinated Plan.—Industrial advertising, like any other business activity, can be fully effective only when it is part of a coordinated plan. Every company should have a clear cut conception of just what it expects its advertising to accomplish. A definite written statement of advertising policy is highly desirable. Buying space and filling it with copy, or preparing and distributing a mailing piece, do not constitute advertising. There must be a unifying purpose behind every piece of copy prepared, every page of space bought, every catalogue listing placed, and every piece of direct mail sent out.

Outlining Objectives.—The first step in preparing a plan for industrial advertising is to determine what part the advertising shall play in the company's broad program of sales strategy

(see Chap. IV). Its objectives clearly defined, the next step is to study the terrain over which the advertising program must operate. An accurate knowledge of the market is essential. Where are the places in which the product is or ought to be used? For what purposes is it used? How does it compare with other means for accomplishing the same end? What are the buying and patronage motives which will prove most influential in stimulating sales? Who are the keymen in purchasing? When these, and a host of minor questions which spring from them, can be answered—and not before—it is time to consider the details of the advertising program.

The Plan and the Budget.—Many concerns selling in the industrial market begin to plan the advertising program by determining how much money is available. They very commonly allot to advertising a definite percentage of past sales, or of expected sales. Sometimes the appropriation is a lump sum which the directors feel that the company can afford. No one will seriously argue that the amount spent for advertising should not be regulated by the company's income and financial position. To start with a fixed appropriation, however, is to put the cart before the horse. No one can know until the advertising job has been analyzed, how much money ought to be spent. It is much sounder practice to plan how the desired objectives may be obtained, and at what cost, and then to lop off parts of the program if available funds are insufficient. Working to an arbitrary appropriation encourages an unbalanced program. In times of good business too much may easily be spent on advertising. The average advertising manager likes to have a large appropriation, and seldom objects. By his acquiescence he is likely to strengthen in the minds of the officials who hold the purse strings the idea that expenditures for advertising should be proportional to sales volume or to net profit. This condition has a bad effect on the work of the advertising manager himself. When appropriations are large he feels that he does not need to plan carefully. When they are very small he is likely to feel that there is no use in planning an ideal program. Yet the mere act of preparing a comprehensive advertising plan is a tremendous stimulus to consecutive and logical thinking and to effective advertising. This holds true even if necessity forces severe curtailment of the ideal program. Therefore the job of advertising should be analyzed and a complete plan for doing the job prepared before the question of ways and means is considered.

Elements of the Advertising Plan.—A good advertising plan has three essential elements: balance, concentration, and continuity. When a company has several markets, the amount of advertising done in each should be proportioned to the available business. This holds true as a long-time proposition. Of course, where a new product is being introduced, or an old product pushed in a new market, it may be necessary to divert a disproportionate amount of the total advertising effort to overcome the initial inertia in the new field. It is also advisable to balance the advertising effort directed toward various classes of officials influential in buying. To advertise exclusively to company presidents and neglect production managers or chemists or engineers is hardly sensible. Each group should receive attention in proportion to its influence in determining purchases.

Concentration.—The most effective use of advertising calls for concentration on major markets. Trying to cover every possible market with a limited appropriation may result in a uniformly thin, and hence ineffective, coverage. Markets should be divided into primary and secondary groups. Those which are most important should be covered intensively. Only when plans have been made for adequate attention to these vital markets should expenditures be scheduled for marginal markets. The principle of concentration should also be applied to the selection of advertising media. In every field one or two leading publications reach most of the buyers. The efficiency of the advertising dollar diminishes as more competitive publications are used. Similarly with direct mail, concentration on the best 20 per cent of the possible purchasers will probably result in covering at least 80 per cent of the total volume of business placed. The select 20 per cent should be covered thoroughly before an attempt is made to reach the rest of the market. This, the underlying principle of selective selling, is equally applicable to advertising.

Continuity.—Intermittent advertising is seldom effective. It is a mark of a weak and vacillating sales policy. It has an adverse effect on salesmen and on prospects. Psychologically, all advertising depends largely on the effect of continuous repetition. Each advertisement gains strength from those which have preceded it. If the program is suspended for any great length of time the influence which has been attained begins to wane. When the advertiser resumes he must start again at the beginning to build up momentum. New buyers are always coming into the

market. Advertising can only attain its full effectiveness if it reaches them when they are ready to buy. The Yarnall-Waring Company, which manufactures valves, found that, in the 20,000 plants which generate 90 per cent of the power used in the United States, 1,000 new faces appear each year. To suspend the company's advertising for even two or three years would

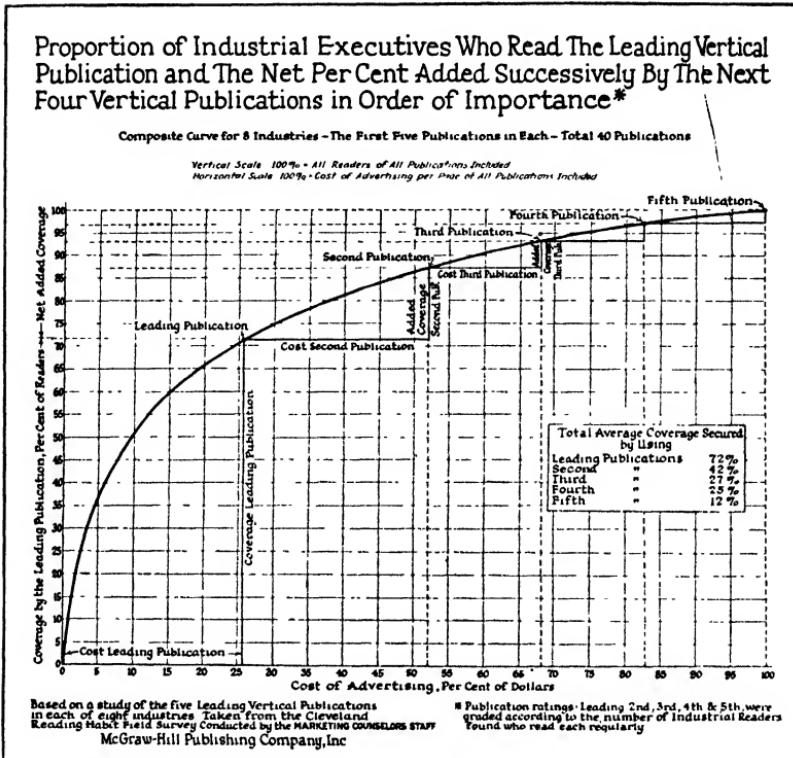


FIG. 37.—An illustration of how the law of diminishing returns operates in the addition of industrial publications which duplicate coverage in the same field. (Courtesy of McGraw-Hill Publishing Company, Inc.)

result in giving competitors an excellent opportunity. There is another aspect of this question. Potential buyers who become interested in a product through its advertising, and who observe the discontinuance of the advertising, may well question whether the product has proved satisfactory. Competitor's salesmen are seldom slow in capitalizing such a situation. A manufacturer is usually wiser to refrain from advertising at all than to advertise spasmodically.

The Selling Message.—In executing the advertising plan, the first problem is the development of the selling message. The type of copy to be employed depends on the objective sought and the buying motives of the people to be reached. A common pitfall of industrial advertising is the tendency to use the same copy in all advertising done at a particular time. It is cheaper to follow this policy, but the result is a loss of effectiveness. If the article being advertised is a piece of machinery, the production man is not going to be interested in copy which appeals to the maintenance man or the treasurer. Copy which tries to appeal to all three loses a great deal of its vitality. Each market and each important group of purchasing influences should be treated as a unit. Preparation costs are almost always smaller than space costs even with the comparatively low rates of business publications. If it is worth while to buy space to reach a certain market, it is certainly worth while to prepare a suitable message to occupy the space.

Performance Copy.—Industrial copy is tending strongly toward the use of examples of specific performance. The primary object of most advertising is to create interest in the product. Buyers become interested in a product only if there is some hope of profiting from its use. The more specific evidence can be presented to justify such a hope, the better the reaction of the prospect. Evidence that the product has solved a problem similar to his own for another concern, particularly one which he knows, practically guarantees his interest. He may accept the statements made in the advertising, or he may question them or even challenge them. In any case the advertising has done its job of paving the way for the salesman's presentation. The Master Builders Company of Cleveland, manufacturers of materials for hardening and coloring concrete floors, had collected data on floors which had been installed over long periods. An advertising campaign stressing permanence and durability, and illustrated by photographs and pertinent facts about specific jobs, brought practically 3,000 inquiries in six months, many of them from prospects that salesmen had previously been unable to see. The Durez Company, manufacturing plastic molding compounds, found specific performance advertising quite successful. This company's product is a fabricating material which is unidentifiable in the finished article. It was being used in many well-known products but Durez was not sharing in the prestige.

The company undertook a campaign in which products using Durez were featured. The campaign brought inquiries from

DOUBLE BEST FORMER RECORD

GOODYEAR COMPASS (CORD) ENDLESS BELT
SPECIFIED BY G.T.M. FOR BEATER DRIVES
KINELANDER PAPER COMPANY
KINELANDER, WIS.

GT.M.-SPECIFIED BELTS
WIN "SHOW DOWN" ON
BUSY PAPER MILL'S
BEATER DRIVES

Have run continuously more than 3 years;
previous belts averaged only 19 months!

FEW, if any, industrial jobs are harder on belts than paper mill beater drives—especially in a plant like the Rhinelander Paper Company, Rhinelander, Wisconsin, that has been operating at capacity all through the depression to supply the demand for their famous greaseproof glazed and waxed papers.

In 1931, the Rhinelander people became "fed up" with belt troubles—stretching and other difficulties that were interrupting production. They put it up to the G.T.M.—Goodyear Technical Man.

**G.T.M. RECOMMENDS
COMPASS (CORD) ENDLESS**

After carefully checking operating conditions with Mr. George H. Sube, Plant Engineer of the company, the G.T.M. specified Goodyear COMPASS "Cord" Endless Belts, 25" long by 20" wide for the drives of large 2,000 pound capacity Jones-Horne Beaters.

Let Mr. Sube tell you the results. He writes:

"Formerly the average maximum life of our belts was only 19 months. Today, a number of your

Goodyear Compass (cord) Endless Belts on
beater drives, Rhinelander Paper Company

COMPASS Belts have been running continuously for more than three years—many more than two years—without stretching or stoppage for repairs!"

Longer service—lower replacements! Troubleshooting—no expensive delays! That has been the record in thousands of plants where belts and other Goodyear Mechanical Rubber Goods have been individually specified to the job by the G.T.M. His practical experience is at your disposal—just write Goodyear, Akron, Ohio, or Los Angeles, California—or your nearest Goodyear Mechanical Rubber Goods Distributor.

**BELTS • MOLDED GOODS
HOSE • PACKING**
MADE BY THE MAKERS OF GOODYEAR TIRES

**THE GREATEST NAME
IN RUBBER**

GOOD, YEAR

July, 1934 POWER

37

(a)

FIG. 38.—Two examples of advertise

many manufacturers. The requests for further information were more intelligent and more productive than the returns from more general types of copy.

Performance copy rouses the interest of prospective customers because it is specific. Where the name of a well-known customer

\$15,000
LOUISVILLE
DRYER
PAYS
\$23,485
IN FIRST
YEAR!

If all dryers (like all Chinamen) look alike to you, here's some food for thought.

During its first year of operation, the Louisville Dryer analyzed at the right, replacing a dryer of another type, saved enough in actual operating costs to pay 92% of its entire purchase price!

In addition (and also during its first year), it produced a sufficiently higher yield of dried product to pay another \$9,600 melon of pure, net

PREVIOUS SYSTEM

(Batch Press and Tray Dryer)

Tons wet material	30,000
Tons dried product	780
Value at 8c/lb	\$115,200
All drying costs	18,720
Net annual revenue	\$96,480

PRESENT SYSTEM

(Louisville Rotary Dryer Plant)

Tons wet material	30,000
Tons dried product	780
Value at 8c/lb	\$114,800
All drying costs	4,815
Net annual revenue	\$119,985

INCREASE IN NET ANNUAL RETURN \$23,485

INSTALLED VALUE, NEW DRYING PLANT \$15,000

profit—over and above the profit paid by the former dryer!

With facts like these before you, don't you think it might pay you to investigate the merits of Louisville Dryers as applied in industries similar to your own?

As an initial step, write today for the booklet "Industry and the Louisville Drying Machinery Co." It is worth your reading. Address: Louisville Drying Machinery Co., *International*, 451 Baxter Ave., Louisville, Ky.

(b)

ments which discuss specific performance.

can be used, an air of authenticity is added. Smaller firms tend to follow the leaders in their line so that this type of industrial copy has much the same effectiveness as testimonial copy has



Thick Cement

ALREADY IN THESE COTS...

* They save you 100% on first cost of coated rolls

These cots are made of a special cement which is applied to the surface of the roll. This cement is applied in a thick, even layer, giving the roll a smooth, polished appearance. The cement is applied to the roll while it is still hot, so that it adheres firmly to the surface. This makes the roll more durable and longer lasting.

**Armstrong's
Seamless
Cork Cots**

FOR SPRAYING, AND CHIPPING
FACILITIES—Tear-Proof

(b)

TWO INSTEAD OF ONE—

With
LANDIS
Style LT
Collapsible
Taps



By installing LANDIS Style LT Collapsible Taps the Parsons Pump Company of Pittston, now obtain a water well coupling in the same time formerly required for one coupling.

Machine 1, one worker needs less 92 minutes to 12 minutes each. Cold water is used.

Machine 2, one worker needs less 92 minutes to 12 minutes each. These couplings are made of heavy steel pipe coupling stock. The threads are 7 diameter 12 pitch U. S. Form 6. Long ends a space of 36 R. M. is used.

Smaller savings are made on other sizes from 3" to 10". One hundred threads are ever aged between grades of the cleaners.

Let us tell you what we can do for your work.

LANDIS MACHINE CO., INC.
TAP DIVISION
Weyersboro, Pennsylvania

Telephone: 5-1244
Cable Address: "LANTAP."

(a)

FIG. 39.—Two examples of copy which point out definitely what the product will do for the buyer.

in the consumer field. It is not, however, always an easy form of advertising to use. The getting of photographs and full data on installations or on process savings is often a troublesome job. Cost figures, which are naturally the most valuable, are particularly hard to get. Customers often do not like their names to be used. Even if the necessary data can be secured, getting permission to publish it may be extremely difficult. A further difficulty is that usually only outstanding examples of performance are featured in advertising. All customers are likely to expect the same sort of results. If, as frequently happens, conditions prevent their attainment, many customers become disgruntled. In spite of these difficulties, copy which features specific performances is probably the most generally effective type.

Importance of Concrete Facts.—Whether or not specific performance copy can be used, the attainment of most industrial advertising objectives requires the presentation of concrete facts as to what the product will do for the user. A description of the company making the product or of the processes of manufacture employed is of little or no interest to the buyer. He wants to know what the product will do for him. It follows, therefore, that the writer of industrial copy ought to be in constant touch with users of the product and with the problems faced by salesmen in selling it. Copy ideas should be secured in the field. Desk-written copy is too often vague and indefinite.

Human-interest Copy.—Even though industrial goods are usually bought on an impersonal basis, a human-interest appeal is often effective. The man who participates in buying industrial goods is, after all, a human being. His attention may be readily attracted by advertising which plays up ideas of current news value. Under some circumstances a humorous appeal may prove decidedly effective in securing attention for a serious sales message. Advertising is essentially an educational process. It seeks to implant new ideas. The best way to introduce a new idea to a man's mind is to associate it with some idea which is already there. On this basis there is practically no limit to the methods which may be used effectively in industrial advertising to win attention. Care must be taken, however, to insure the transition from the device used to secure attention to the merits of the product itself. The use of human interest appeals is particularly valuable where the margin of technical quality between competitors in the same field has become small. In such cases the human element becomes extremely important.

Institutional Copy.—Institutional copy, which plays up the size or efficiency of the selling company, is probably the easiest

1 MILLION VOLTS

... with SKF in the delivery end of the job

Feeding up through the cylinder to the lighter of the wires during the **SKF** copy-edited paper cutting job.

Do you... The million volt generator started at the Massachusetts Institute of Technology, the source of atomic energy and for the development of atomic power? Do you... **SKF** Bearing Company has rollers on which the atomic energy is being used to produce electrical energy for the atomic power plant?

When Science in her varied tasks encounters a demand for bearings, the selection is invariably and quite naturally **SKF**.

Minds that grope among strange forces and in new worlds should not be beset with old problems. Great researches into new fields cannot be jeopardized by the threat of a bearing failure.

So the man of science turns as a matter of course to bearings that he *knows* will stand up... that he *knows* are true... that he *knows* are backed by the world's foremost corps of bearing engineers and whose knowledge he can draw upon at will.

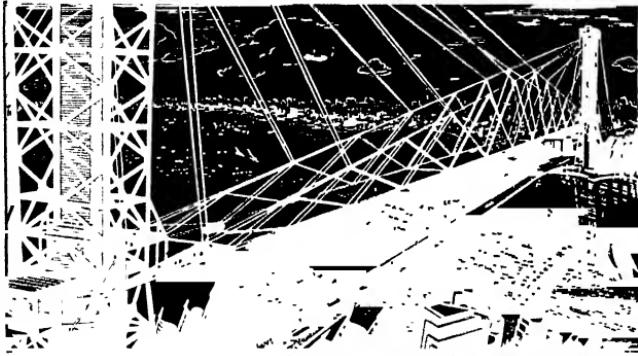
Thus the Massachusetts Institute of Technology, in planning the most powerful attack ever made on the stronghold of the atom, joins with the rest of the world in the selection of **SKF** Bearings. In a bearing performance is the only thing that counts.

SKF
BALL & ROLLER BEARINGS

(a)
FIG. 40.—These two advertisements tie their selling

type of copy to write. Frequently it is also the easiest type for which to secure the approval of company officials. For most purposes, however, it is weak and decidedly lacking in selling

power. It has its uses. Where a company makes products for many distinct markets, a program of institutional advertising to



The *Century of Progress*, Chicago made possible the *World's Fair*. *Century of Progress*, Chicago made possible the *World's Fair*. *Century of Progress*, Chicago made possible the *World's Fair*.

1½ MILLION PEOPLE CARRIED SURELY AND SAFELY

...on the Sky Ride, spectacular Century of Progress feature—suspension system designed and installed by ROEBLING...

Did you go to Chicago's Century of Progress? If so, you saw and probably rode on the Sky Ride, the modern World's Fair's spectacular feature and successor to the once conspicuous Ferris Wheel.

1½ million people in five months of 1933 were carried surely and safely on the Roebling Cable Suspension System—on cars which traveled a total of

50 to 80 thousand miles.

Towers are 628 feet high
... over ½ a mile

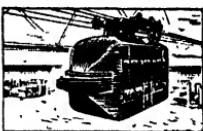


One of the 628-foot Sky Ride towers, which have been equipped with Roebling Wire Rope.

miles apart—and their Otis Elevators are equipped with Roebling Wire Rope. Span between towers, is second longest in world. 10 Roebling "rocket" cars—each of 36 passengers—safely—travel 200 feet above ground on Roebling "Sky Ride Track Cable."

Roebling was selected to design and install the Suspension System of the Sky Ride because of its vast experience and the unquestioned dependability of its bridge cables and wire rope. It designed this system in collaboration with Robinson and Steinman, well-known bridge engineers.

For over 90 years Roebling has been the pacemaker in wire rope and bridge



One of the Roebling rocket cars designed by Roebling in collaboration with the General Electric Corp.

cable development! These Roebling Products assure the highest obtainable degree of safe, economical service.

**WIRE ROPE FOR ALL NEEDS...
LARGE OR SMALL.** No matter how exacting the service, or how large or small the order may be, Roebling can meet your requirements. Any size order will receive the same careful, prompt attention, whether for a cask of rope or merely a few feet. John A. Roebling's Sons Company, Trenton, New Jersey.

ROEBLING

The Pacemaker in Wire Rope Development

July 1934—POWER

77

(b)

message in with contemporary news developments.

which the specific product campaigns are tied may prove effective in building and maintaining prestige. Where a company's development frequently leads it into new fields, a general institu-

tional campaign may afford a favorable background and thus enable a new product campaign to get off to a better start. Institutional advertising may help materially in attracting good



FIG. 41.— In seeking a "human interest" touch, this advertisement follows the cartoon technique currently popular in consumer goods advertising.

men. These instances indicate that it is generally a suitable type of advertising only for the large company with diverse interests.

Mechanical Preparation.—The mechanical preparation of industrial advertising is not in any essential respect different from the preparation of general consumer copy. Illustrations, typography, and layout should be consistent with each other and in harmony with the tone of the copy. Perhaps somewhat less attention is paid to these points in the industrial field. There is a tendency to try to hold the expenditure for preparation down to a definite proportion of the space cost. This tendency is no doubt responsible for the rather poor appearance and technical quality of much industrial advertising. It is unfortunate that so many advertisers should take this point of view. An industrial prospect is much more valuable as a customer than is a household consumer. The expense of preparing a good setting for good copy should not be regarded as prohibitive. In recent years industrial advertising has shown a great deal of improvement in this regard. This is probably due to the increased degree to which the services of skilled advertising men and agencies have been employed.

Industrial Advertising Media.—An approximate idea of the relative importance of different industrial advertising media may be gained from a series of surveys of technical publicity budgets made by the National Industrial Advertisers' Association. These studies covered a fairly good cross section of the larger concerns engaged in different industrial markets.

TABLE IV.—ALLOCATION OF ADVERTISING BUDGETS

	1929	1931	1932
Number of companies studied	177	165	160
Trade and business papers:			
Space	46 1%	44 5%	29 4%
Preparation	7 0	9 6	7 5
Direct mail	13 0	12 6	14 7
Sales and service literature	11 0	10 8	11 5
Miscellaneous (including space in general magazines).	7 0	5.2	5 2
Motion pictures, photographs, etc	1.0	0.3	0 2
Ratio publicity expense to sales.	1.71	3 00	2.36

Vertical and Horizontal Media.—The industrial advertiser has available for his use a great number of trade, technical, and business publications. Each aims to cover its own particular

segment of the industrial market. The field which each covers and its standing within that field depend largely on the type and



THE
J & L CONCEPTION
OF A
"CUSTOMER'S MAN"

Jones & Laughlin engages a large corps of men to **VERIFY** the quality of all **J&L** products, in addition to employing the best of materials, modern production equipment and highly skilled workers. As example, one-sixth of all the men responsible for **J&L** seamless tubular goods are engaged in various phases of test and inspection. Their job is to be sure that every length of pipe that leaves the mill is entirely fit for the customer's needs. This scrupulous guarding of the customer's interests is one of the reasons why **J&L** obtains and keeps customers.

J&L STEEL PRODUCTS

Open Hearth and Bessemer Steel

Billets Sheet Bars Skelp For Rolled Bars Plates,
Shapes, Strip and Shaws Light Weight Channels
Riveted Spikes and Tie Plates Bars for Con-
crete Reinforcement Forging Steel Jumbo
Sheets Cold Drawn Steel Sheet Piling
Jumbo Beams . . . Fabricated Structural Work
Standard Pipe Oil Country Pipe Boiler Tubes
Mechanical Tubing Wire Rods and Wire
Products Tin Plate and Black Sheets Coke
By-Products



JONES & LAUGHLIN STEEL CORPORATION

AMERICAN IRON AND STEEL WORKS
JONES & LAUGHLIN BUILDING PITTSBURGH, PENNSYLVANIA

Atlanta Boston Chicago New Orleans New York Philadelphia Pittsburgh St. Louis San Antonio
Baltimore Charlotte Cincinnati Detroit Houston Indianapolis Kansas City Louisville Milwaukee
Oklahoma City Omaha Portland San Francisco Seattle St. Paul

BUSINESS WEEK

(a)

FIG. 42.—Two examples of industrial advertisements which emphasize the characteristics of

quality of its editorial content. The most important classification of business papers divides them into "vertical" and "horizontal" media. The vertical medium concerns itself with the

problems peculiar to a single industry. It usually appeals to executives and subexecutives of all ranks. Typical vertical

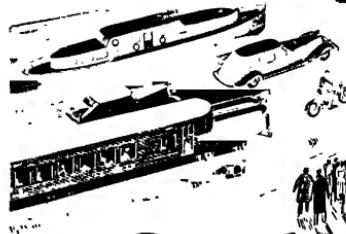
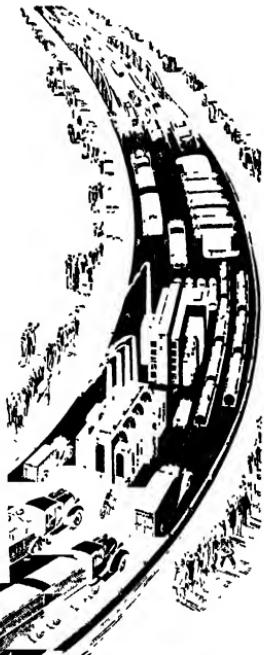
RUBBER on the March

A MAKER of toy automobiles changes metal wheels to rubber... and sales leap. Railroad trains and automobiles cry for speed, but speed brings disastrous vibration—until rubber absorbs it. Marine propeller-shaft bearings have been cursed with short life—until bronze is replaced with soft rubber, and life is increased ten times.

Paper is made better and cheaper with rubber rolls. Transcontinental pipe lines become practical because of rubber gaskets. Bridges become safer with rubber expansion joints. Accidents and depreciation both are cut in chemical plants when rubber-lined tanks are perfected.

These and a thousand other developments are the work of Goodrich application engineers, making good their promise—All Products and All Problems in Rubber.

In almost every industry and every enterprise, rubber is one of its countless forms has a part—or should have. Today rubber can be so made that it will flex countless times, will adhere to metal, will last for years, and will resist abrasion, chemicals, heat, oxidation. If what you make or use could benefit by one or more of these qualities, Goodrich can show you the way. The B. F. Goodrich Rubber Company, Mechanical Rubber Goods Division, Akron, Ohio.



Competent Goodrich men prepared to demonstrate the adaptability of rubber to practically any and all chemical demands and are ready to cooperate with responsible man-ufacturers exploring opportunities for rubber in the development and design of their products.



**GOODRICH MECHANICAL RUBBER
GOODS ALREADY INCLUDE.**
Conveyor Elevators and Transfer Belts
Air Lines and Hose, Suction Hoses, Rubber
Lamps for Mines, Packing and Piling Tanks
Tank Cars, Pipe and Valves, Packing, Molded
Rubber Products—Heels and Soles—and a
Complete Line of Miscellaneous Rubber Items

Goodrich

ALL *products problems* IN RUBBER

2

BUSINESS WEEK

(b)

reliability and versatility of their sponsors, rather than the particular character of the product.

publications are *Steel*, *India Rubber World*, *Textile World*, and *The Oil, Paint and Drug Reporter*. Horizontal publications concern themselves, not with the problems of any particular

industry, but with those encountered by men with similar functional responsibilities throughout the whole range of industry. Thus *Management Methods* (formerly *System*) deals with office management, *Product Engineering* devotes itself to the problems of the man concerned with product design, and *Business Week* seeks to reach the executive who determines policy.

Judging Industrial Publications.—By choosing the proper combination of business papers, an advertiser can reach almost any desired part of the industrial market. In determining whether or not to use a particular publication, a great deal of attention should be paid to the editorial content. Is the material presented of the type which will be of interest to the people the advertiser desires to reach? Is it of a quality which insures that it will be thoroughly read? The more useful a trade paper is to its readers, the more valuable it is as an advertising medium. The nature and quality of the editorial matter to a large extent determines the type of circulation. The advertiser or his agency will also check circulation data against his judgment of editorial quality. Many publishers furnish detailed breakdowns of their circulation which show the number of subscribers segregated by types of positions held or by industries. A publication's membership in the A. B. C. (Audit Bureau of Circulation) adds authenticity to its circulation claims, since its figures are subjected to periodic impartial audit as to extent and certain quality factors. Most of the better-grade business papers belong to the A. B. P. (Association of Business Paper Publishers), an organization which devotes itself to the general raising of editorial standards.

Business and trade papers may be judged as to their value for advertising industrial goods by the following criteria:

1. Appeal to readers.
 - a. Editorial appeal—judged by the type of reading matter, its amount, and the reputations of contributors.
2. Attention from readers.
 - a. The kind and amount of attention a magazine receives are naturally governed to a large extent by the conditions under which the magazine is circulated and read.
3. Circulation.
 - a. Size.
 - b. Distribution:
 - (1) In respect to markets for the product to be advertised.

- c. Quality:
 - (1) As determined by the type of readers, which itself is shown to a large degree by the editorial content of the magazine.
 - (2) As shown by the methods used to get circulation—the extensive use of "chit" systems, premiums, and other similar devices is *prima facie* evidence of comparatively poorer quality circulation.
 - (3) As shown by the subscription price of the magazine.
- d. The buying habits and influences of the industries covered by the magazine. Here also must be considered the fact that two or more men usually must decide on the purchase of an industrial good.
- 4. General.
 - a. The age, soundness, and reputation of the magazine.
 - b. The appearance of the magazine.
 - c. The opportunity the magazine presents for good illustration and for the presentation of the details of the advertiser's message.
- 5. The cost of advertising:
 - a. Per prospect reached.

The following formula for the qualitative evaluation of industrial periodicals as advertising media was presented by Fred R. Davis of the General Electric Company at the National Industrial Advertisers' Association annual convention in 1924.

	Maximum Rating
Contents:	30
Editorial	(17)
Policy is independent	(2)
distinctive	(1)
and constructive	(2)
Gives variety of informative	(3)
and well-written current articles	(2)
and authoritative contributed articles	(3)
that are appropriate	(2)
Has demonstrated high reader interest	(2)
Advertising	(13)
Space cost per milline is low	(6)
Publisher maintains high standards	(3)
with good variety and reasonable volume	(3)
and convenient arrangement of index	(1)
Make-up:	20
Cover	(5)
is attractive	(2)
and relevant	(2)
and controlled by publisher	(1)
Stock	(5)
prints well with standard screen half-tone	(3)
and is right weight	(2)

	Maximum Rating
Composition.....	(10)
Type is readable	(1)
measure is right for type.....	(1)
margins are normal	(1)
type page is normal size	(3)
illustrations are good	(1)
arrangement of articles is convenient	(1)
and text is properly located in relation to advertising pages.	(2)
Circulation:	50
Distribution	(10)
reaches buying powers	(4)
in a uniform manner	(2)
and completely covers territory	(2)
that is active for products advertised	(2)
Subscriptions	(15)
Are paid for	(1)
independent of other payments	(3)
without premium inducements	(1)
or commission agent's solicitation	(1)
or any agent's solicitation	(1)
under rigid collection method	(1)
have high recirculation value	(2)
and low waste circulation.	(2)
Business methods	(25)
include sound publishing history	(4)
a high revenue from subscriptions	(3)
a voluntary subscription renewal	(3)
with few or slight arrearages	(2)
and only normal circulation fluctuations	(1)
membership in Audit Bureau of Circulations	(10)
and audit reports that confirm publisher's statements.	(2)

General Media.—The advertiser who sells his goods to a small homogeneous group in the industrial market will no doubt confine his periodical advertising to trade papers. The company which counts among its prospects a large portion of the whole industrial market will not infrequently decide to use general media like the *Saturday Evening Post* or *Time*. Such makers of store and office equipment as the National Cash Register Company and Remington-Rand, for instance, want to reach every business executive. To advertise in each and every business paper would pile up rather large aggregate space costs. A page

in a general medium like the *Saturday Evening Post* may cover the field at a lower cost per prospect. (A study some years ago in Schenectady, New York, showed that the *Saturday Evening Post* was read in 75 per cent of the homes where the head of the house was an executive.) The proponents of trade papers may reply that business men are much more likely to see the advertising in trade papers, the entire content of which concerns itself with their business interests. In reading general magazines the executive is interested in the editorial content alone. It may also be argued that the executive is thinking about his business when he reads the trade paper and is seeking relaxation or general information when he reads the general publication. On this basis, business-paper men claim that the advertising in their publications is more effective. They also point to the habit of many executives, particularly purchasing agents, of filing copies of trade journals for future reference, somewhat as they use catalogues.

The relative efficiency of one type of advertising media as compared with another is hardly susceptible to direct proof. There are cases where industrial advertisers feel that general media have yielded valuable results. On the other hand, there has been a rather high mortality in industrial advertising in consumer media. An analysis of those industrial advertisers who have consistently used general media for a long time discloses that they are usually companies with large sales, serving broad markets, and that their general advertising is in addition to a fairly intensive use of business-paper space. Black and Decker, for instance, uses industrial publications to reach its major markets and employs general media for broad, thin markets.

Collateral Advertising.—The most significant use of general magazine space by industrial advertisers is for so-called "collateral advertising." The objective of this is to induce the ultimate consumer to accept, prefer, or insist upon the use of the advertiser's part, material, or process in the finished goods which he buys at retail. Thus the American Rolling Mills Company advertises its Armeo Ingot Iron to the householders who buy sinks, kitchen tables, washing machines, and similar metal products. If this campaign succeeds in its attempt to convince buyers that the use of Armeo sheets insures a durable product, the intermediate manufacturer who uses them enjoys a strong selling point. Incidentally, the advertiser in such a

case builds up a strong set of patronage motives. The manufacturer who benefits from the producer's collateral advertising

FIG. 43.—An example of collateral advertising, which seeks to induce consumers to prefer articles identified as made of the advertised material.

is not likely to change his source of supply, even if a small difference in price exists.

Importance of Identification.—Effective collateral advertising usually depends on the existence of a means of identifying the

constituent part or material in the finished product. The usual procedure is to attach in some way to the finished product a symbol which identifies the material. This identifying symbol is featured in all the consumer advertising done by the primary manufacturer. It may be brought to the consumer's attention at the time of purchase by a tag, label, sticker, attached plate, package insert, or booklet. Goods fabricated from Armeo Ingot Iron bear the Armeo label, usually pasted on in a conspicuous place. The use of Talon Fasteners in clothing, golf bags, etc., is attested by an identifying tag prominently displayed. The Ethyl Gasoline Corporation identifies gasoline containing ethyl fluid by a distinctive orange-red color and also has stenciled on all pumps dispensing this gas its familiar triangular trade-mark.

Limitations of Collateral Advertising. -A manufacturer of industrial goods who advertises his product to consumers not only secures benefits but also assumes certain responsibilities. If a material advertised to consumers is used in a poorly made finished product, the reputation of the material manufacturer is likely to suffer. The Goodall Worsted Company some years ago advertised its Palm Beach cloth to consumers and furnished to clothing manufacturers identifying labels to be sewn into garments made with this material. The collateral advertising and the quality of the fabric won a high degree of general favorable recognition for the name "Palm Beach." Unfortunately, certain garment manufacturers put out low-priced suits in which they used the genuine Palm Beach cloth, but skimped in cutting and workmanship. These cheap suits flooded the market. Men who bought them and received poor service tended to blame the material. This situation practically destroyed the value of the collateral advertising.

The primary manufacturer who would identify his goods to the consumer must, therefore, exercise control over his customers. If his output is fairly small, he may be able to select a group of fabricators who will not discredit his product. If he can secure needed volume only by selling to all comers, he will usually find it easier not to identify his goods. The large producer, however, may develop a special quality line which he advertises to consumers and sells only to those intermediate manufacturers whose standards of workmanship are satisfactory. This involves considerable expense in investigating customers' manufacturing standards and in sampling and testing their products as they appear on the market.

Another way of handling this problem has been developed by Continental Mills, manufacturers of woolen fabrics. This company will develop a special brand, with exclusive patterns, for each large customer. For instance, it has given Levy Brothers and Adler the exclusive privilege of using the "Mt. Rock-Fleece" brand. Advertising of the fabric brand is done cooperatively by Continental Mills and the garment manufacturer.

In general, a producer benefits from collateral advertising only when he can provide for the identification of his material in the finished product and can exercise some supervision over its use, or when he so dominates his field that any increase in consumption redounds principally to his own benefit. Standard Brands advertises to consumers in an attempt to get them to buy more baker's bread. It is not feasible to identify the brand of yeast or baking powder used in bread. Nevertheless, the company can be sure, by virtue of its importance in the industry, that it will obtain a large share of any additional demand created by its advertising. It also benefits, of course, from the good will created among bakers.

Cooperative Advertising.—In some cases this sort of advertising is undertaken by a group of competing manufacturers, acting through their trade association. The objective in such cases is usually to stimulate public demand for a particular material. Thus the Copper and Brass Research Association advertises the superior durability of chromium-plated articles with a copper or bronze base. The hope is that through the campaign the salability of plated copper articles will be enhanced so that manufacturers will buy copper instead of cheaper metals. To be fully effective, there must be some way of identifying the advertised material so that the ultimate buyers can be sure that they are getting what the advertising has led them to expect. When an arbitrary symbol is used for identification, its use may be limited to those producers who have contributed to the cost of the campaign. The principal handicap of cooperative advertising projects is the difficulty of getting all members of the industry to participate. In many cases those who stay out benefit to the same extent as those who come in.

Direct Mail.—Direct mail is extremely important in industrial advertising. To sell most industrial goods it is necessary to convince several men, each of whom views the purchase from a different angle. The highest degree of selectivity in the adver-

tising approach is afforded by direct mail. It is useful alike to the company which cannot find a combination of trade papers to cover its market adequately, and to the company which needs to supplement its periodical advertising with more specific or more detailed sales arguments.

Mailing Lists.—A prime essential of good direct-mail advertising is the building and maintenance of a good mailing list. The ideal industrial mailing list would include the name of every official important in influencing purchases of the article advertised in every concern which is a potentially profitable customer—and no others. The ideal is unattainable. Usually some potential purchasers are omitted. The identity of keymen is not determinable, so some important executives are often left out while others with no influence are included. Men change jobs from time to time and errors thus creep into the list. Constant diligence is required to make a mailing list a worth-while tool of advertising.

Sources of Mailing Lists. Names for the mailing list may be secured from many sources, among them:

1. Names of past customers.
2. Names of prospects furnished by salesmen or distributors.
3. Membership lists of engineering or professional societies.
4. Trade and industrial directories.
5. Classified telephone directories.
6. Exchange of lists with noncompeting firms serving the same industries.
7. Replies to advertisements.
8. Houses specializing in the preparation of lists.

Names secured from any source should be qualified before adding them to the mailing list. From trade directories it is usually possible to determine a company's approximate production capacity or invested capital. From a credit-reporting service its financial rating can be ascertained. Some directories and purchased lists include names of officers or executives holding specified positions. Those names which are patently worthless should be excluded.

Maintaining Lists.—When a complete master list has been built it should be subclassified to fit into the advertiser's plans. This may be done by using colored cards or by attaching colored tabs to addressograph plates. The usual classifications are of firms by industry and of officials by function. Alphabetical and geographical arrangements are often helpful in checking the list.

Before a list is used it is often desirable to have it checked by salesmen or branch managers, who can often add or eliminate names. To keep a list up-to-date calls for a rigorous and continuous checking process. Salesmen should be encouraged to report new concerns, changes in address, and changes in purchasing officials. Some trade and technical papers list changes in position or employment of officials. Such lists should be carefully scanned. Business papers in which the company advertises will often check mailing lists or allow advertisers to use their subscription lists. Where mail is addressed to individuals, postmasters will supply forwarding addresses for a nominal fee if a proper notation is made on the face of the envelope.

Direct Mail a Specialized Medium. —The primary advantage of direct mail is the ability which it gives to appeal to specialized interests. Simply to send out standardized literature is using this medium to do what can be accomplished more cheaply through space in industrial publications. Making direct mail specific adds greatly to its effectiveness. The Ditto Company found that, by classifying its mailing list into 33 major groups and 350 subgroups and sending to each group a portfolio illustrating pertinent applications, it could increase its percentage of inquiries from 3 or 4 per cent to from 8 to 20 per cent. Where the budget will not permit the preparation of special booklets or folders for each subclassification of the market, a covering letter can help greatly in linking the general appeal of the advertising to the prospect's specific situation. Carefully prepared letters always improve the reception accorded to booklets, catalogues, or reprints of advertisements. Forrest U. Webster of Cutler-Hammer, Inc., described to the Industrial Marketing Division of the American Management Association in 1930 an experiment to determine the importance of a letter. The objective of the particular campaign was to obtain requests for a booklet. To half of the total list of 2,000 names he sent a reprint of an advertisement describing the booklet and a return postcard. Results were insignificant. To the 1,000 other names he sent a letter calling attention to the reprint and the booklet offer, using the same reply card. Returns from this mailing were in the neighborhood of 12 per cent.

House Organs.—The house organ is a publication issued with more or less regularity by an individual company and circulated

to a regular mailing list. Its purpose is to promote the sale of the company's products. Its content usually resembles the editorial pages of trade or technical publications, with technical articles, operating data, and perhaps illustrations of installations or applications of the company's products. They range from the simple folder to the rather elaborate magazine, according to the size of the company and its belief in the efficacy of this form of advertising. As a rule little attempt is made to keep the distribution of house organs on a very selective basis. Salesmen are asked to send in names of possible prospects, recipients are often invited to send in names of friends who might be interested, and sometimes advertisements solicit requests to be put on the mailing list. Persons in attendance at conventions of trade associations or technical societies are likely subsequently to find themselves on several house-organ mailing lists. Although it costs little to print and mail extra copies of a house organ, too indiscriminate a mailing policy may result in considerable waste. Some advertisers endeavor to check this by mailing annually to all names on the list a request to indicate whether or not the publication is desired. This procedure often results in a substantial reduction in the print order. The value of a house organ is probably directly proportional to the ability of its editor to include material of real interest or value to men who have something to say about the purchasing of the company's products. Some are regularly filed for reference by plant men and engineers, while others achieve the wastebasket without being read.

Catalogues.—Catalogues constitute an important part of the advertising of many companies serving the industrial market. They are particularly useful when there are many sizes, shapes, or varieties of the product, as is the case, for example, with gears or bearings. Their objective is different from that of most of the material prepared by the advertising department. They aim, not to interest the prospect in the product, but to provide a means of reference to ascertain what sizes and varieties are available, their specifications, and their applications. The intention is that they shall be preserved by purchasing agent, plant superintendent, design engineer, consulting engineer, architect, or other recipient. To insure maximum effectiveness, then, they should be so prepared as to be easily filed and readily used for reference. Definite standards exist for catalogues destined for architects' files. Convenient indexing and the use of thumb

tabs when the catalogue is at all voluminous are very helpful. It is often possible to use the catalogue to help sell the product. The inclusion of tables, formulae, and other working data may result in making the catalogue a convenient desk aid of the engineer. The company which is fortunate enough to have its catalogue used in this way has an obvious advantage over competitors.

A company making many related products used in a variety of industries often faces the problem of whether to issue a comprehensive catalogue or to prepare a separate catalogue for each industry or each class of products. This problem may well be solved by the use of a loose-leaf binder, in which the appropriate sections for each customer's use can be inserted. Such a make-up also facilitates the revision of individual sections without the necessity of reprinting the entire catalogue. Many manufacturers of industrial goods now print their catalogues in 4- or 8-page sections.

Directory Listings.-- Provision is made in a great many industrial advertising programs for buying listings or space in the various trade directories and buyer's guides, such as Sweet's *Engineering Catalog*, the *Chemical Engineering Catalog*, and Thomas's *Register of American Manufacturers*. Somewhat akin to these are listings in the classified sections of telephone directories and in city directories. Such publications are almost universally found upon purchasing agents' desks and are utilized at least for locating sources of supply for items for which regular sources have not been developed. Some advertising managers question the value of these catalogues and directories as advertising media. It is practically impossible to determine the results secured from their use. The cost of using them is relatively small. A possible criterion for judging the value of any such publication is to ask the company's salesmen once a year to notice whether it is in evidence in the offices of prospects upon whom they call.

The Agency vs. the Advertising Department.--A moot question in this field is whether industrial advertising can best be handled by an advertising department within the company or by an outside advertising agency. For the small advertiser with a limited budget which is insufficient to pay for one competent advertising man, there is a very strong case for the use of an agency. To delegate the advertising as a part-time job to an

unskilled man is usually to waste the appropriation. Through the agency skilled talent can in effect be rented by paying for the time used. For the larger advertiser, the question is more difficult to resolve. It is argued on one side that the agency brings an outside point of view, resulting in more effective copy and the adaptation of good ideas from other fields. Opposed to this is the claim that the same man working for an advertiser produces more specific copy than when he works for an agency. He is closer to the product and its market and his attention is not divided. As for expense, it is argued that an agency can attend to the writing and mechanical preparation of advertisements more cheaply than can a company advertising department. It is made up of specialists. It has close and continuous contact with printers, photographers, and engravers. On the other hand, some advertising managers claim that space (where publishers quote flat rates) and preparation costs are sufficiently lower when advertising is placed directly to cover the overhead of the department. The need for preparing many advertisements for appearance in many different publications leads almost inevitably to rush jobs now and then. For the advertising department to deal direct with printers and engravers eliminates time lost in getting two approvals. This is one of those questions to which there is no general answer. Each company in the end will make its own decision, based on its ability to secure either able advertising men or competent agency service.

A study of 215 industrial advertisers made in 1932¹ showed 101 employing agencies and 114 handling their advertising through their own publicity departments.

Special Agency Services.—Most agencies do a great deal more for their clients than the ordinary jobs of preparing copy and layout, selecting media, arranging schedules, and checking insertions and billings. The agency often acts as a marketing counselor, analyzing the client's markets and helping in the preparation of a comprehensive and coordinated sales plan. It is an unfortunate fact that the managements of many concerns serving the industrial market are not particularly sales minded. Others find it difficult to secure or pay for the services of men competent to formulate broad marketing plans. Such companies may wisely turn to qualified agencies to do this work. It is true

¹ MORRISON, G. W., and J. D. McDONALD: *A Survey of Technical Publicity Budgets*, National Industrial Advertisers Association, Chicago, 1932.

also that the better industrial agencies, with their wide contacts with other industries, can bring in an outside point of view which makes for a broader perspective. Then, too, the agency may have access to valuable sources of information not available to the individual advertiser. It may be able to maintain an able staff of market-research men which could not be duplicated by the manufacturer with limited resources.

Agency Compensation.—Agency compensation in the industrial field is based to an increasing degree on prearranged fees rather than on the 15 per cent commission on space. Space costs are so much lower in industrial publications than in general magazines that a 15 per cent commission on space would seldom cover the cost of the service rendered by an agency to an industrial client. Direct mail plays a more important part in industrial advertising and this emphasizes the inadequacy of the agency commission method. To make the agency's income from an account dependent on the amount spent for space creates a temptation to recommend excessive use of space, or to pad costs on folders and mailing pieces which are billed through the agency, or to slight the preparation of copy. It is a much more satisfactory situation for both advertiser and agency if payment is based on services rendered, even if the agency fee amounts, as it may for the small advertiser, to 30 or 40 per cent of the appropriation. When the agency is paid on a fee basis, all commissions are of course credited against the fee.

The Industrial Advertising Appropriation.—One of the most difficult problems faced by the advertiser is that of determining how much to spend, both in annual total and for each individual product. Practically universal recognition is given to the idea that a definite amount should be budgeted. This is necessary to insure a proper balance of expenditures throughout the year. It is also helpful in that it forces the advertising manager to plan carefully and weigh the need for expenditure in one direction against that in another. There are several possible ways of determining how large an expenditure shall be made for advertising in a given period.

1. The appropriation may be set as a percentage of sales for the past year. This has the advantage of simplicity but it is more likely than not to result in either excessive or insufficient expenditures. If last year's business was good, more money may be appropriated than is needed to secure the desired sales. If last year's sales were

		MARKETS			PRODUCTS				
KEY		<input type="checkbox"/> Primary Markets <input type="checkbox"/> Secondary Markets <input type="checkbox"/> Important Recommending Factors							
Mines and Quarries									
Public Utilities									
New Construction, Engineering and Contracting									
Power Plants									
Process Industries									
Metal Working Industries									
Textile Industries									
Lumber Industries									
Miscellaneous Industries									
Sales and Distribution Organization									

Working Form for Market Determination

This list of markets presents a comprehensive picture of the buying structure of Industry. The nine major industrial divisions have been subdivided to show the single industries in each division which form distinct sales out-

lets for most industrial products. A vertical column should be assigned to each product, and the market ratings should be entered by some simple coloring scheme, such as red for primary and blue for secondary markets

FIG. 44.—A working form which is of material help in selecting media for an industrial advertising campaign. For each product, primary markets may be marked in red, secondary markets in blue, and important recommending factors in yellow. Individual periodicals may then be considered in connection with the degree of coverage of the selected markets which they afford. (Courtesy of McGraw-Hill Publishing Company, Inc.)

poor, the appropriation may be inadequate to cover the market, thus curtailing sales in the succeeding year.

2. A percentage of expected sales may be used as the basis for the budget. Here again there is no true relation between the appropriation and the need. If poor sales are forecast, curtailing the budget may impair the chances of attaining even the reduced sales expectancy. It is a tenable proposition that the ratio of advertising to sales should not be constant, but should rise as sales volume falls and fall as volume rises. To expect it to remain constant is to infer that advertising is a result, not a cause, of sales.
3. Allowance of a flat amount per unit of product sold is another possible basis. This is subject to the same difficulties as outlined above. If it is based on current sales, instead of past or forecasted sales, it precludes budgetary control of expenditures.
4. A sounder plan is to determine the objectives to be sought, to plan how to attain these objectives, and then to allot the necessary funds. This is in keeping with the idea of formulating a complete advertising plan, as discussed earlier in this chapter (see page 183). It permits the advertising to fulfill its part in the general sales plan. There is a limitation, however, in the financial ability of the company to finance the contemplated program. If the advertising budget must be curtailed, it should be done by reconsidering the complete plan and eliminating the least essential objectives, rather than by applying a flat cut to all activities.

Advertising in general seeks one or both of two objectives. It may aim to affect present profits either by increasing sales volume or by decreasing sales costs. Or it may seek to insure future profits by securing recognition and good will for the company's products. Advertising which seeks to secure present profits is properly treated as a current expense. It is perfectly reasonable to set up a definite percentage of expected sales beyond which it is not profitable to go. Advertising which aims at future profits, however, is essentially a capital investment even if it is not feasible to set it up on the books as such. The true measuring stick here is the return which is expected over a period of years and the limiting factor is the company's ability to invest in the future.

Responsibility for the Budget.—The advertising manager should prepare the company's advertising plan to coordinate with and support the general sales plan. If his proposed budget is curtailed, he should be permitted to decide how the plan should be changed to render the maximum possible support to the sales force. He should be held rigidly responsible for results. If this is done, however, he must also be given absolute control over his

advertising budget. It is all too common a practice among industrial concerns to saddle the advertising department with all sorts of miscellaneous expenses such as donations, policy purchases of space in customers' house organs, convention programs, and similar items. These are not legitimate advertising expenses and should be charged outside the department's budget.

Reserve for Contingencies.—Every industrial advertising budget should include a reserve to care for unexpected contingencies. A special sales opportunity may arise unexpectedly and advertising support be required. A competitive situation may suddenly call for extra advertising on some product in the line. Such temporary situations should be cared for without the need for asking for special appropriations or disrupting the prepared plan.

Testing Advertising Results.—An exceedingly important part of the advertising department's job is to test the results of its activities wherever and whenever possible. This not only helps to do a better job, but it may provide tangible justification for appropriations. The advertising manager of one large concern selling to industry checks all large orders against the circulation lists of the periodicals he uses. While this does not prove whether the advertising helped to make the sales, it does show whether or not it reached the right places. It is often interesting to compare sales volume and advertising appropriations for each line of products over a period of years.

Most testing of industrial advertising represents attempts to compare different pieces of copy or different media. The commonest gauge used is the number of inquiries produced. When this method of testing is used, some attempt is usually made to encourage inquiries. In space advertising, requests for a booklet or other material may be solicited. Proper credit to the medium or copy being tested may be insured by keying the address, the commonest plan being to use a different street number or department number for each insertion. A larger number of replies is usually secured when the advertisement contains a coupon. Keying of coupons is quite simple, involving merely an identifying mark in some inconspicuous position. Returns from direct-mail pieces may be properly credited by printing the reply cards somewhat differently for each mailing, or by using different colors of card stock. When it is desired to test one mailing list against another, the mailings should be identical, but code markings may be placed inconspicuously on each card.

Testing advertising by the number of inquiries produced has its uses, but the significance of such tests is often exaggerated. It is easily possible to expand or contract the volume of inquiries by changing the tone of the copy or the size or position of the coupon. The objective of advertising is not to produce inquiries, but to assist in effecting sales. Publication A may produce more inquiries at a lower cost for each than Publication B, yet more sales may result from the fewer and more expensive inquiries from B. The ultimate test, therefore, is not cost per inquiry produced, but cost per dollar of sales subsequently made to inquirers.

Testing through the use of keyed copy has produced some interesting facts regarding the durability of advertisements in industrial periodicals. By use of a time key the Brown Instrument Company found that, for every 100 inquiries produced in 1925 from copy run during that year, 40 inquiries were produced in 1926 and 10 in 1927. This clearly demonstrates the extent to which men influential in purchasing tear out and file away advertisements for products which they do not need at the time, but expect to buy in the future. Incidentally, a higher percentage of these delayed inquiries resulted in sales.

Inasmuch as sales to industry are almost never made by advertising alone, but result from the combined impression produced by publication advertising, direct mail, and personal sales attention, it is difficult to evaluate the specific influence of advertising. Perhaps the best measure of the effectiveness of a particular piece of industrial advertising is the extent to which it wins the attention of potential purchasers. In the field of consumer advertising, various techniques have been developed which try to measure this. Most frequently used, perhaps, is the Gallup method. This involves leafing through various publications with consumers and asking them to designate each advertisement which they remember having seen before. It would unquestionably be difficult to apply such a technique in the industrial field. Some measure of attention value, however, would be distinctly helpful. It could be used by advertising departments in gauging the effectiveness of copy appeals, of layout, and of illustrations, and the value of different media. A possible approach to the problem, developed to a slight extent by a few companies, is the systematic observance and report by salesmen of the degree of attention aroused by particular pieces of advertising.

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CHAPTER XIII

CONTROLLING MARKETING COSTS

Increase in Marketing Costs.—One of the most obvious and widely discussed phenomena of business in the decade 1920–1930 was the steady increase in the cost of marketing goods. Marketing costs include every item of expense involved in getting the finished product on the floor of the factory shipping room into the possession of the buyer. There are the costs of wrapping, crating, and labeling, of trucking and freight, of warehousing, of soliciting orders, of billing and invoicing, of advertising and promotional work, and of supervision of the entire marketing process. The increase was most noticeable in the field of consumer goods. Less attention was given to a similar growth of costs in industrial marketing, probably because the latter is less conspicuous in everyday life.

Causes.—The increase in industrial marketing costs in the postwar decade can be traced to several causes. Foremost among these is undoubtedly the desire for constantly increasing sales volume which was shared by virtually every manufacturer. This led to the extension of sales operations into areas where customers were few and widely scattered, or too small to serve economically, or not in a position to make effective use of the product. In other words, sales effort was extended, not only beyond the point of diminishing returns (which may be a profitable procedure), but into the zone where each increment of business meant a net loss instead of a profit. A strong contributing cause was the almost universal tendency toward hand-to-mouth buying, a result of heavy inventory losses in the 1920–1921 business depression. This reduced the average size of orders, required an increase in the frequency of sales visits, and forced duplication of expense in the physical handling and the recording of transactions. Another important cause was the keen competitive situation, always present in an era of credit inflation, which resulted in the extension of new and expensive services to customers in order to attract business. The sharp decline in

industrial sales volume in the years subsequent to 1929 made the problem more severe. Marketing costs could not be reduced as rapidly as sales volume. Few business men were in a position to know which costs represented essential activities and which did not. In all too many cases there was no breakdown whatever of marketing costs. Unfortunately, there was not a great deal known about the technique of handling this class of costs.

Need of Knowing Marketing Costs.—A detailed knowledge of marketing costs is of particular importance in a period of reduced sales volume. Since the demand for industrial goods is largely a derived demand, and therefore inelastic, practically the only hope for maintaining profits in such a period lies in cost reduction. Business men realize, however, that reducing marketing costs in the wrong direction may mean a lowering of volume which more than offsets the savings effected. The task is to find the points of wastage.

Costs by Products.—Many concerns serving the industrial market sell several products. They are not all equally profitable. Each may have a gross margin between its selling price and its manufacturing cost which more than covers the average percentage cost of selling; yet one may cost so much to sell that it merely serves to dissipate the profits earned by the others. A certain manufacturer, for instance, had sales of \$8,208,900 and a total selling cost of \$446,000, or a ratio of cost to sales of 5.2 per cent. That this figure was meaningless is clearly shown by a

TABLE V

Products	Sales, dollars	Sales cost, dollars	Ratio: cost/sales, per cent
A	5,500,300	119,300	2.17
B	75,000	2,800	3.73
C	759,800	41,100	5.4
D	1,645,400	260,200	15.8
E	205,100	10,000	5.0
F	19,600	7,200	36.8
G	3,700	5,400	146.0

breakdown of his marketing costs by products. A manufacturer with two products may derive 80 per cent of his sales from one, yet spend 80 per cent of his marketing expense on the other. Unless he realizes the situation, he may overprice

the first and underprice the second, losing volume and potential profits on the one, and losing cash on the other. This sort of situation is likely to feed on itself. The second product may have a higher margin between manufacturing cost and selling price. This may lead to an increase in sales effort on that product and a greater loss at the end of the next accounting period.

Costs by Territories.—Similarly, a concern selling its goods in a number of different territories will invariably find it helpful to compare the selling costs in each area. It is easy to spend an inordinate amount of money in cultivating territories which are not productive of profits. To lump sales costs is to obscure losses of this character. If the different marketing areas are under the supervision of branch managers, an analysis of territorial costs is a positive necessity in measuring performance. The following table convinced one manufacturer of an industrial line of the desirability of realigning his branch organization. It also caused a reversal of opinion as to the relative value to the company of the managers of Districts B and C.

TABLE VI

Districts	Per cent of total gross sales yielded	Per cent of total direct sales expense incurred	Per cent of total customers in territory	Ratio of expense to sales in territory, per cent
A	38.7	23.5	29.4	0.72
B	24.5	26.8	30.4	1.31
C	23.1	15.6	11.6	0.81
D	4.5	6.7	7.7	1.75
E	0.8	2.9	4.5	4.27
F	3.0	7.2	5.9	2.93
G	1.5	6.1	4.5	4.93
H	3.8	10.5	5.4	3.32
I	0.1	0.7	0.6	7.15

This particular line of product would not stand a large amount of direct sales expense, as the margin was small and administrative expense not inconsiderable. In the case of certain districts there was definite reason to expect that future increases in the volume of business handled would make them profitable. In other cases there was no apparent hope of putting the branches

on a profitable basis. Withdrawals and consolidations in these areas resulted in a noticeable decrease in marketing cost.

Cost Figures a Spur to Action.—In most companies the laying out of territories and the assignment to them of salesmen have been done originally on a hit-or-miss basis. A careful realignment of sales effort along the lines suggested in Chap. VIII will almost invariably pay handsome dividends in such cases. However, there is among most business men a tendency to put off such basic readjustments and to assume that the old setup works well enough. Detailed cost figures frequently provide the necessary spur to action. The general manager of a company marketing an operating supply item was shown the following breakdown of sales expense by territories:

TABLE VII

Districts	Direct selling cost per dollar of sales	Number of salesmen
A	\$0.063	3
B	0.086	2
C	0.095	2
D	0.051	2
E	0.143	4
F	0.161	3
G	0.088	2
H	0.271	3
I	0.169	2

An investigation to determine what lay behind the figures revealed that in District H, with a sales cost of 27 per cent, there were sectional influences which made it difficult to sell the product. Potentially, considerable volume existed. The territory covered a wide area and three men had been thought necessary to cover it adequately. By withdrawing one man and rerouting the other two, relaxing somewhat the attempt to secure new business in this area, most of the existing sales volume was held and the selling expense was reduced to about 20 per cent. District D, with the lowest selling expense ratio, was already thoroughly covered, but analysis revealed that in District A, where selling expense was only 6.3 per cent, many possible users were not being called upon regularly. The salesman withdrawn

from the high cost District H was placed in District A. Sales volume increased materially, without much change in the district's ratio of selling expense. The net result was to give the company more business at a lower cost per unit.

Costs by Customer Classes.—One of the most general causes for excessive marketing costs is the soliciting of business from customers whose total volume of purchases yields an insufficient margin to cover the cost of dealing with them. An analysis of almost any industrial seller's accounts will show that 85 to 90 per cent of the total sales comes from 10 to 15 per cent of the customer accounts. If the major part of the sales expense is incurred in securing the lion's share of the business, the situation is sound. But in the average case, a very large part of the total selling expense is incurred in bringing in the smaller part of the total sales. The situation which existed some years ago in one large company indicates very clearly the need for analysis of the cost of serving customers of varying size.

TABLE VIII

Size of group (annual sales)	Percentage of total number of accounts	Percentage of total volume of business
Over \$100,000	3.3	60.4
\$50,000-\$100,000	2.8	12.6
10,000- 50,000	12.4	18.9
5,000- 10,000	9.7	4.2
1,000- 5,000	19.3	3.0
500- 1,000	12.0	0.5
Under \$500	40.5	0.4
	100.0	100.0

This preliminary analysis of accounts stimulated a further investigation to learn how sales activity was being apportioned among these various size-groups of accounts. Salesmen's reports were scrutinized and it was found that a very large proportion of their calls were on customers whose profitability was doubtful.

Strikingly similar results have come from studies made by other companies serving the industrial market. Table IX shows another classification of customers by volume groups. The company which made this study investigated further to find

TABLE IX.—ANALYSIS OF SALESMEN'S EXPENSES¹
First Six Months

Salesman	Salary and traveling expenses	Total sales	Ratio of expenses to sales	Average sales per account			Large accounts			Balance of accounts		
				Number of accounts	Number	Total sales	Number	Total sales	Number	Total sales	Number	Total sales
A	\$ 5,755	\$208,519	2.76	167	20	\$1,247	13	151,327	55	\$106,410	147	\$ 724
B	7,426	241,886	3.07	68	3,557	13	151,327	55	90,559	1,647		
C	5,302	139,897	3.79	53	2,640	15	80,201	38	59,696	1,571		
D	8,723	195,582	4.46	52	3,761	9	115,436	43	80,146	1,864		
E	5,195	80,204	6.48	136	590	6	23,802	130	56,402	434		
F	5,592	52,291	10.69	75	697	4	26,153	71	26,138	368		
G	5,976	52,252	11.44	70	746	6	31,553	64	20,699	323		
Total of all	.....	\$43,969	\$970,631	4.53	621	\$1,563	73	\$530,581	548	\$440,050	\$ 803	
Best four.....	.....	\$27,206	\$785,884	3.46	340	\$2,311	57	\$449,073	283	\$336,811	\$ 1,190	
Their share.....	.....	62%	81%	.....	55%	.....	78%	.....	.....	.....	.....	.....
Worst three.....	.....	\$16,763	\$184,747	9.07	281	\$ 657	16	\$ 81,508	265	\$103,239	\$ 390	
Their share.....	.....	38%	19%	.....	45%	.....	22%	.....	.....	.....	.....	.....

NOTE: All figures are hypothetical but are generally illustrative.

¹ HEITKAMP, F. B.: *Product and Market Research*, American Management Association, Industrial Marketing Series, No. 14.

what was the minimum size of account which could be served at a profit. This cost accounting study showed that any account which ran below \$1,000 a year did not yield a gross margin as large as the expenses conservatively allocated to it. Here again the activities of salesmen were investigated. In this case, instead of an analysis of call reports, the accounts of each salesman were classified. It was found (see Table X) that the average size of account covered by some of the salesmen was distinctly below the point of profitable operation. Here again a redistribution of salesmen's time had a beneficial effect on marketing costs and on profits.

Determining the Profitable Size of Account.—To determine what is a profitable size of account does not involve a complicated costing technique. One easily workable procedure is to determine the total salaries and traveling expenses of all the salesmen selling the line in a specific territory during a definite period. This total is divided by the number of calls made during the same period. This gives an average "cost per call" figure. While this does not, of course, represent the true cost of any particular call, it is thoroughly satisfactory as a practical measure. Similar standard costs may be worked out for direct-mail pieces, letters, telephone calls, and other forms of sales activity. An average cost of carrying an account on the books is easily calculated. Then a random sample of accounts (perhaps those beginning with certain letters of the alphabet) is selected. The cost of sales activity devoted to each account is calculated, using the standard figures mentioned above. The total volume of purchases is determined for each account and the gross margin calculated. Deducting from this the total selling cost the net return for soliciting the particular customer's business is determined. From scanning the results in perhaps a hundred cases, the point of profitable volume is easily ascertained. It is wiser in such calculations not to try to allocate general items of expense such as supervisory salaries or other overhead items. These costs go on whether or not a specific account is solicited. The object sought in a study of this nature is not to balance precisely moneys received and expended, but to distinguish with a minimum of cost between profitable and unprofitable sales activities.

Costs by Size of Orders.—Another field where analysis is often useful is the determination of what constitutes a profitable size of

TABLE X.—CLASSIFICATION OF CUSTOMERS BY VOLUME OF PURCHASES

	Number of customers										Sales					
	Cumulative					Cumulative					Cumulative					
	Number	Up	Down	Percent	Up	Down	Percent	Up	Down	Percent	Up	Down	Percent	Up	Down	
Preferred list	6	426	6	1 4	100	0	1 4	\$1,272,000	\$2,232,000	\$1,272,000	57 0	100 0	57 0	100 0	57 0	
A. Others over \$6,000	27	420	33	6 3	98	3	7 7	655,000	960,000	1,927,000	29 3	43 0	43 0	86 3	86 3	
B. \$5,000-\$6,000	5	393	38	1 2	92	3	8 9	27,000	305,000	1,954,000	1 2	13 7	13 7	87 5	87 5	
C. \$4,000-\$5,000	11	388	49	2 6	91	1	11 5	49,000	278,000	2,003,000	2 2	12 5	12 5	89 7	89 7	
D. \$3,000-\$4,000	15	377	64	3 5	88	5	15 0	53,000	229,000	2,056,000	2 4	10 3	10 3	92 1	92 1	
E. \$2,500-\$3,000	15	362	79	3 5	85	0	16 5	42,000	176,000	2,098,000	1 9	7 9	7 9	94 0	94 0	
F. \$2,000-\$2,500	5	347	84	1 2	81	5	19 7	11,000	134,000	2,109,000	0 5	6 0	6 0	94 5	94 5	
G. \$1,500-\$2,000	13	342	97	3 0	80	3	22 7	23,000	123,000	2,132,000	1 0	5 5	5 5	95 5	95 5	
H. \$1,000-\$1,500	31	329	128	7 3	77	3	30 0	39,000	100,000	2,171,000	1 7	4 5	4 5	97 2	97 2	
I. \$600-\$1,000	31	298	159	7 3	70	0	37 3	26,000	61,000	2,197,000	1 2	2 8	2 8	98 4	98 4	
J. Under \$600	267	267	426	62 7	62	7	100 0	35,000	35,000	2,232,000	1 6	1 6	1 6	100 0	100 0	

Note: All figures are hypothetical but are generally illustrative.

order to handle. Many companies have found that a large proportion of their orders do not yield a gross margin large enough to defray the cost of handling them. This may be true whether an order comes from a small or a large customer. In a study made some years ago, the Western Electric Company determined that the expense involved in filling orders under \$25 varied from \$3.25 to \$5, according to the nature of the items which made up the order. The average gross profit on such orders varied between 71 cents and \$4.48. The average loss on each order for less than \$25 worth of merchandise was \$1.63. As such orders amounted to 60 per cent of all orders filled, the aggregate loss involved was in excess of \$750,000 annually. A situation similar in nature, if not in extent, exists in a large proportion of companies acting as distributors of industrial goods of low unit value. Manufacturers are not immune, for both distributors and customers who buy direct often place small orders in the pursuit of hand-to-mouth buying policies.

Determining Order Handling Costs.—The technique of determining the cost of handling the individual order involves somewhat more detail than does the costing of the individual account. The basic principle is to set up the various items of expense along functional lines, to determine for each function the factor which governs its cost, and to allocate costs on that basis. For instance, the cost of storage is obviously proportional to the amount of floor space occupied. If we determine the cost per square foot of warehouse space, we can determine the cost of storing any item by figuring from its weight or bulk how many square feet of space it occupies. A suggestive list of factors which have been used in costing individual orders is appended.

FUNCTION AND ITEM
Selling:

Salesmen's salaries }
Salesmen's expenses } Standard cost per call, times the number of calls, divided by the number of orders.

Handling:

Packing }
Loading } Standard cost per hundredweight times the weight in hundredweight.
Shipping }

Packing materials:

Crates, boxes, etc. Actual cost for each order, or standard cost per dollar value, per product unit, or per hundredweight.

Freight: trucking. Actual cost for each order.

BASIS OF ALLOCATING COST

FUNCTION AND ITEM	BASIS OF ALLOCATING COST
Sales bookkeeping:	

Billing {	.....	Standard cost per item, times the number of items.
Posting		Standard cost per invoice.
Credit and collection..	....	Standard cost per letter or call, times the number used.

Standard Costs.—The standard cost figures for specific operations may be determined by dividing the total cost of performing the operation for a definite period by the number of times the operation is performed. Where expenses have not been segregated by functions, another way of building standard costs is to time-study each operation and multiply the average time taken by the wage rate. To this may be added the average cost of materials used, if any. This is an item which can also be ascertained by observation. Standard cost figures must obviously be checked from time to time. In particular they should be redetermined whenever any important change is made in any operation.

Determining the Minimum Profitable Order.—To determine the minimum profitable order, the soundest procedure is to take a representative sample of orders, perhaps those coming in on a single day or week, and cost out each order. The average gross margin on each order can be recorded in a parallel column, and by inspection the approximate size of order necessary for a profit can be ascertained.

Significance of Cost Analyses.—The significance of such analyses of cost of handling orders and accounts of varying size is frequently challenged by business men. It is often held that small customers must be served in order to maintain volume and that small orders may come from large and profitable customers. It is true that it is often not expedient to discontinue serving small customers or to decline to handle small orders. It is also true that sound business policy requires that no loss be incurred on any transaction without full realization of its amount and a careful evaluation of the advantages secured by taking it. In many cases cost analysis of this sort has shown the way to improved methods. The Western Electric study mentioned above led to a revision of the order-handling routine, by which the cost of handling the small order was reduced to 25 per cent of the former figure. A large electrical manufacturing company uses its selling-cost figures to convince its salesmen of the desira-

bility of handling small accounts through distributors. Sometimes such studies have led to revision of discount schedules or the inauguration of a quantity discount system. A large paper manufacturer, faced with a considerable aggregate loss on small orders, inaugurated a service charge of \$1 on all orders amounting to \$25 or less. The effect was to cause most of his customers to curb their extreme hand-to-mouth buying tactics and to bring about a substantial increase in the size of the average order.

Marketing Costs and Budgetary Control.—It is particularly vital to the sales manager who is operating under a system of budgetary control that he know his marketing costs in great detail. He must be able to plan in advance what it will cost him to attain certain objectives. He will need to know how much, on the average, it costs him to add a new customer and how much to keep in touch with an old one. He may find it most helpful to know how much it costs per dollar of sales to get an order from a coal mine as compared with a producer of electric power. The accurate forecasting of costs of securing business is nearly as vital as correct estimating of sales volume (see Chap. IV for a discussion of budget formulation). A comprehensive system for collecting current marketing costs is also a tremendous aid in administering sales activities. To know that a certain branch manager spent too much money in running his office last year is of some historical interest, but it does not help to balance last year's budget. To have last month's figures by the tenth of the current month for comparison with a predetermined standard permits the exercise of really effective control. The cost sheets of those divisions of the organization which have exceeded their budgets can be scrutinized in detail. The direction of excessive expenditures can be traced and the causes sought. Sometimes unforeseen circumstances are responsible, and nothing can be done. More frequently a subordinate executive needs admonishing or assistance in attaining efficiency within his domain. Just as the quota is a valuable aid in revealing how salesmen should be trained, so the budget helps by pointing out what weaknesses of subexecutives need to be overcome.

The Flexible Budget.—The budget serves as a useful standard for measuring performance, however, only when the volume of sales actually attained corresponds to that which was planned. Because plans formulated in advance are fallible, the device

known as the "flexible budget" is of considerable importance in measuring performance under changed conditions. A flexible budget is built in terms of two elements: (1) fixed cost, including those items which remain constant practically regardless of volume, and (2) variable cost, including those items which vary in direct proportion to the amount of business done. For example, consider the case of a branch manager who is expected to produce \$400,000 of sales on a budget of \$40,000. His fixed expenses, including such items as office rental, clerical help, salesmen's salaries and expenses, are \$30,000. Variable expenses, such as freight, commissions, cost of installation service, etc., amount to $2\frac{1}{2}$ per cent of sales, or \$10,000. If the actual volume of sales is \$300,000 his expenses should be \$30,000 plus $2\frac{1}{2}$ per cent of \$300,000, or a total of \$37,500. He may be criticized for failure to produce the planned volume of sales, but, if that was due to causes beyond his control, he should not be penalized for failure to hold his expenses down to 10 per cent of sales. Similarly, if his actual sales volume was \$500,000, his expenses should be \$30,000 plus $2\frac{1}{2}$ per cent of \$500,000, or a total of \$42,500. In this case if his expenses still amount to 10 per cent of sales he may have been unduly extravagant in managing his territory.

Securing Usable Marketing Cost Data.—The collection of marketing cost figures is properly a function of the accounting department. In many concerns there is a good deal of difficulty in getting the accounting staff to develop reports which sales executives can use. When this trouble arises, it is usually from one of two causes. Reports may not be in proper form because the accountants do not understand the sales manager's problems; nor does he understand accounting techniques well enough to prescribe how the material he wants shall be prepared. Many accountants are likely to feel that sales-cost accounts should be tied in some fashion to the general books and should balance to the last penny. This results in slowness in reporting results, and often inability of sales executives to get reports the nature of which precludes complete accuracy. The best instances of cooperation between sales and accounting departments seem to have developed under the auspices of men from the field of manufacturing-cost work who have been assigned to the job of securing adequate control over marketing costs. The problems of sales-cost accounting are different from those of factory

accounting and in many respects they are more difficult. Marketing is often conducted under conditions of joint costs where definite allocation of expenses is almost impossible. New techniques must be evolved. Distinct progress has been made, but, on the whole, development in this field is in the embryonic stage. The next few years will doubtless bring important improvements both in the services rendered by accountants to industrial sales executives, and in the ability of the latter to use them.

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CHAPTER XIV

MERCHANDISING, OR PRODUCT PLANNING

Importance of the Right Product.—An old maxim says that “goods well made are half sold.” Certainly any salesman of industrial goods will agree that a product which is exactly suited to the needs of his customers is easier to sell than one which is less perfectly adapted to its intended use. Every manufacturer of course intends that his product shall be suitable for the purpose for which it is sold. Yet it is only necessary to talk with a few purchasing agents to discover how general is the failure of suppliers to offer exactly the right product. This condition is not hard to explain. The complex relationships of modern business have pushed buyer and seller apart. Beyond this, changes in demand have become more frequent and more violent in recent years. Keeping products in line with demand has, therefore, become an increasingly difficult task in the past decade. At the same time, it has become increasingly necessary. Of late competition has tended toward equalization on nearly every plane. The producer who has his industry's lowest-cost plant today can be sure that tomorrow someone else will build a plant that will operate more cheaply. The man with the best sales force will find that his competitor can sooner or later match him. Advertising space and talent are for sale on the open market. As competitive factors tend to be equalized the emphasis comes more and more on price—and competition based on price alone is usually ruinous. The manufacturer serving the industrial market has little opportunity, as a rule, to build up a widespread preference for his goods based on imaginary virtues, heavily advertised. He must deal with hard-headed buyers who know what they want. The best way for him to evade the rigors of price competition lies in the direction of skillful merchandising.

THE MERCHANDISING FUNCTION

“Merchandising” may be defined as “the planning and control of merchandise in order to adapt it to market demand.”¹

¹ M. T. Copeland and E. P. Learned, in a report, *Merchandising of Cotton Textiles*, published by the Harvard Graduate School of Business Adminis-

It includes a rather wide variety of activities. Merchandising precedes the processes of production, whereas most of the other marketing functions are performed subsequent to production. A brief classification of the principal problems of product planning is:

1. Diversification.
 - a. Creation of new products.
 - b. Adaptation of existing products to new uses.
 - c. Adaptation of existing products to changing demand.
2. Simplification.
 - a. Elimination of obsolete products, varieties, and items.
 - b. Elimination of superfluous varieties and items.
3. Grading and quality standards.
4. Identification, brands, and trade-marks.
5. Packaging.

Diversification.—One of the major merchandising jobs is that of making sure that the line of products is properly diversified. An industrial market may at any time be wiped out by technological change. Dependence on a single industry for orders is seldom conducive to great stability. A manufacturer with a large investment in plant is usually wise to develop products for several industries, thus spreading his risks. A manufacturer of chemical stoneware enjoyed phenomenal success during the war, tration in March, 1933, present the following definition:

“Merchandising is product planning. The job of merchandising is to ascertain the characteristics of the merchandise for which there is a potentially profitable demand, to prepare instructions for the manufacturing plant in order that it may be able to produce goods for which a demand exists, to aid in developing plans for promoting the sales, and to supervise various routine operations in connection with these activities. It includes the determination of what to make, how much, at what time, and at what price.”

The term “merchandising” originated in the field of department store retailing. There it includes both the qualitative and quantitative aspects of product planning and control. It includes not only the selection of products, but the determination of how much to buy, the control of inventory, and the pricing of the goods. The author has chosen to confine this chapter to the purely qualitative aspects of merchandising. The control of quantity is inextricably woven with the problem of budgetary control, which, however, deals with men and money, as well as with merchandise. The setting of prices involves so many considerations of policy that it is thought advisable to handle this subject in a separate chapter. As a practical matter of fact, where merchandising departments have been instituted in concerns selling to the industrial market they generally confine their activities to the control of the product and its characteristics.

thanks to contracts for equipping explosives plants. The termination of hostilities left him high and dry with a plant but no market. He turned to industries which were large users of acids. The steel industry, he found, was using lead-lined wooden pickling tanks. He was able to develop a stone tank which had many advantages and to reap substantial orders. But such tanks are fairly durable, and he realized that no single industry could keep his plant busy indefinitely. Other acid-using industries were investigated. Their special problems were studied and products developed to fit their needs. In this way a substantial and permanent business was built up.

The creation of new products may be forced on a company which desires to maintain a position of leadership in its field. The Babcock and Wilcox Company, which had specialized in the manufacture of steam boilers, found that the increase in furnace sizes and operating temperatures necessitated special refractories. The company therefore proceeded to develop a line of refractory brick for furnace lining which would withstand the higher temperatures. This step was essential to the development of more efficient boilers.

An initial step in the direction of diversification often leads inevitably to further additions to the line, or to entrance into new fields. Sometimes this widening of activities is advantageous; in other cases it presents serious dangers. To increase the sale of its refractory brick, and thus to lower manufacturing costs and to reclaim development expense, the Babcock and Wilcox Company diversified its markets and went into the process industries. Refractory brick was sold to chemical, ceramic, and metallurgical plants. At the same time it became necessary to develop mortars and plastic cements of special characteristics. These moves proved highly beneficial. As the 1930 depression caused the construction of power plants to fall off, the sale of refractory material proved a good backlog. A policy of diversifying products and markets frequently makes a business more stable, and lessens the effect of cyclical or seasonal variations in sales.

Another form of diversification is also illustrated by an experience of the same company. Out of its research work came an insulating refractory which made unnecessary the construction of composite furnace walls lined with firebrick backed with insulating brick. This was developed initially to withstand

extremely rigorous conditions. It was costly to manufacture and had to be priced at a high figure. In many cases users' requirements were less severe, and the price of the new insulating brick was uneconomically high. The company therefore developed a Junior brick in which a balance was struck between quality and price, based on a careful study of the actual requirements of different users.

Diversification as a Policy.—In many fields manufacturers are offered a clear-cut choice between the policy of constantly developing new products on which a handsome profit can be made during the pioneering period, and the policy of sticking to a single product and making it in large quantities with maximum efficiency and at a minimum cost. The manufacturer whose equipment is somewhat obsolete, or who suffers from an unfavorable location, can often overcome his handicaps by a strong program of product research. If he can develop new products which are particularly well suited to buyers' needs he can secure prices sufficiently high to overcome his handicap plus development expense. He must remember, however, that, except where good patent protection can be secured, competitors will after a time match his product at lower prices than he can afford to offer. His permanent success must depend on his ability to bring out other new and improved products from time to time. The possibilities which lie in this policy are well demonstrated in the case of a large producer of wood pulp and paper. Once dominating the market for sulphite pulp, it was forced to compete on a continuously less profitable basis with mills which obtained their wood supplies at lower cost, and with imported pulps which could be landed at less than its cost of production. A long-continued policy of research and product development yielded dividends in the form of a process for making a wood pulp of unequalled purity. This product was able to enter new fields and to command a price which meant profits instead of losses.

Development of New Products.—The development of new products cannot be handled on a hit-or-miss basis. A program should be based on a carefully considered policy decision as to the field in which the company is to operate. The choice of a field of operations may hinge on the nature of available raw materials, the nature of the plant and equipment possessed, the special skill of employees, the location of the plant, or some other dominant factor. Once the company's field is determined,

an intimate study should be made of the requirements of the customers in the area of industry chosen. This will almost invariably uncover problems, from the solution of which come products which can be made and sold profitably. An oil-refining concern in a southern state faced geographical limitations to its operations. Close by were many sawmills, large consumers of lubricating oils. Study of their problems disclosed that many of them had trouble with vegetable material in the water, which formed a film that removed the lubricants they used. Engineers of the oil company studied the problem and succeeded in developing an oil which resisted the unfavorable condition. This oil found a ready market, practically regardless of price.

The International Business Machines Company has for its field of activity the manufacture of machinery to facilitate business control through records. It maintains a "future demands department," the staff of which is made up of men with broad backgrounds in various businesses. This department is charged with the specific responsibility of anticipating new business needs for such machinery and of finding ways to meet these needs as fast as they appear. First-hand studies of industries are made. When a new and sufficiently wide-spread problem is discovered, a machine is designed and built to fit it.

Similarly, the Paterson Vegetable Parchment Company seeks new product opportunities by studying the wrapping and packaging problems of industry. In one instance it was discovered that the kraft paper used for packing lettuce for shipment disintegrated when the ice necessary in shipping the product melted. A parchment wrapping material, Durapak, was developed, and a new market was won. This company not only goes out to study the problem of potential users of its products, but it seeks through advertising to induce industrialists to bring their problems to the attention of company engineers.

Finding New Uses.—An extremely important phase of merchandising is the discovery and development of additional uses for products which are already being made and sold. This activity seeks to diversify markets, rather than products. It is a profitable activity, for it broadens market opportunities, increases sales volume, and frequently stabilizes the sales curve. The problem is susceptible to an orderly and systematic approach. Some concerns are known to have scrutinized the entire field of manufacturing industry to determine places where their products

could possibly be used. The possible applications have then been analyzed and those which seemed to offer possibilities of profitable sales handed over for sales promotion work. A more common practice is to depend on users to uncover new applications. The Dry Ice Corporation is reputed never to sell an order without knowing the specific use to which the product is to be put. The Haskelite Manufacturing Corporation, a manufacturer of plywood, keeps a book in which are recorded all uses to which the product is put. Every salesman is required to record on each order the nature of the customer's business and the use for which the product is purchased. As a new application is discovered, the advantages and disadvantages of the product for that particular use are studied. The extent of the market is analyzed. If it appears promising, sales and advertising attention is given to the new use.

The problem of tracing the uses to which customers put a product becomes more difficult when distribution is through jobbers. The Columbian Rope Company, however, found it possible. They featured stories of odd uses for their rope in a house organ. For descriptions and pictures of odd uses they offered \$5. Also a cash award was made to any jobber's salesman who observed and reported a new use. Most of the applications reported were of trivial importance as regards markets, but enough valuable ideas were obtained to make the company well satisfied with the venture.

Another source of ideas for new uses is in suggestions which almost every company receives from time to time from persons who have occasion to work with the product. A concern making sharpening stones found that it received many valuable new-use ideas from factory mechanics in customers' plants.

Importance of Proper Timing.—Proper timing is important in considering possible new applications for a product. About 1920 the Bakelite Company investigated the possibility of using bakelite molding powder to produce caps for collapsible tubes, jars, and bottles. The project then was not feasible, mainly because of the price differential between tin and bakelite. A few years later, however, tin prices were higher, bakelite was cheaper, and the molding process was more efficient. More important, a strong tendency toward the use of color for "dressing up" packages had developed. Under these changed conditions it was possible to develop successfully this new use for bakelite.

Technological changes may have an important effect in widening the field of use for an industrial product. The widespread use of aluminum alloys for automobile pistons was made possible, for instance, by the development of cutting tools of Carboloy which could work the metal at reasonable cost.

Developing Markets for Customers.—There has been considerable activity in recent years by manufacturers of materials in trying to broaden their markets by developing new products or new applications for their customers. The DuPont Rayon Company desired to introduce rayon into automobile upholstery. Its development department installed some textile machinery and with the services of skilled designers created several attractive new fabrics suitable for this use. Selected weavers of upholstery fabrics were then approached and offered the use of these designs in their efforts to sell automobile manufacturers. General Plastics, makers of Durez, seeks to interest manufacturers in the idea of using molded plastic parts. Sometimes designs are developed. The ultimate user is then referred to a custom molder to get the work done. The New Jersey Zinc Company and the American Sugar Refinery Company have found it profitable to maintain service departments devoted to the development of new products and new applications for their customers. In many cases the manufacturer of raw materials must depend for much of his business on the purchases of thousands of small manufacturers. The latter cannot afford skilled designers and capable merchandising men. By furnishing service of this sort, the raw-material manufacturer can effectively compete with manufacturers of other types of material.

Revamping Old Products.—Another important merchandising problem is that of diversification with respect to the dimension of time. Even when the same product continues to be sold to the same people and used in the same way, it is frequently necessary to change its design or composition from time to time in order to adapt it to changing requirements of the market. This sort of merchandising is one of the chief weapons of competition. An improved machine tool, or an improved steel alloy which will do a better cutting job, or a purer raw material which increases process yields, may give the company responsible for the improvement a very decided advantage over competitors. Especially in the field of major equipment, a policy of improving the product as rapidly as possible is one of the chief hopes of main-

taining volume. If improvements can be made which are sufficiently fundamental, then much old equipment is rendered obsolete. It is cheaper for its owners to junk it and purchase new equipment than to continue to operate the old. Speeding up the rate of obsolescence stabilizes the capital-goods market. Sales of capital equipment for new plants or for expansion fluctuate violently from one stage of the business cycle to another. Sales for replacement are somewhat more stable. In a period of generally depressed business, few industries install additional equipment, and few sales are made because of the wearing out of old equipment, since the rate of wear and tear is slower. The only considerable possibility for sales of capital equipment at such times lies in the sale of improved equipment which will so reduce operating costs as to justify its purchase.

Design.—It is not possible in the industrial market, where rational buying is the rule, to force obsolescence through changes in external appearance, as is done, for instance, in the automobile industry. Nevertheless, aesthetic design is becoming a factor of some importance in the sale of industrial equipment, particularly where the choice lies between two or more makes of the same product. The General Electric Company has felt that the problem is of sufficient importance to set up a general design committee. The following excerpt¹ outlines its activities:

With the object of coordinating the style and design effort for the plant as a whole, a general design committee was appointed about five years ago and has been functioning ever since. This committee is composed of three members, one a production engineer, one a designer of A. C. equipment and one an illuminating engineer qualified to present the architectural viewpoint. In this way a proper balance is secured among the three principal factors to be considered, that is: (1) practicability from the standpoint of production, (2) efficiency of operation and (3) appearance.

It is the function of this committee to pass on the design of each new or revised product before it is entered into production. It is the practice of this committee to sit down with the engineers or designers directly responsible for the product and to work out with them a final product that will present the most attractive possible appearance commensurate with utility. Wherever possible, an effort is made to have an actual model on hand.

¹ From a report, *The Use of Style and Design in Industry*, by the Policy-holders Service Bureau, Metropolitan Life Insurance Company.

Naturally with products such as motors, turbines, switchboards, etc., artistic efforts are not required. However, the company realizes that much of this equipment is installed in plants where public inspection is frequently invited. For this reason it is important that it present as attractive an appearance as possible.

Accordingly, smooth surfaces and regular curving lines are the objective. Wherever possible, sharp angles are rounded off, protruding nuts and bolts are submerged and frequently, irregular and unattractive mechanism is totally encased in a metal envelope in order to secure the proper compact, unbroken effect. Of course, cleanliness of moving parts and safety of operators are also contributing factors.

In the case of switchboards, instruments are designed and arranged in a way to present a symmetrical appearance as well as from the standpoint of convenience and an attempt is made to have them harmonize in color and form with the surroundings. For example, all metal fittings have been given a uniform color to properly harmonize.

Not only the form but also the finish comes in for serious consideration and study. As a general rule, the company determined upon a standard color and many experiments were completed before a satisfactory result was secured. It has finally settled on a bluish gray color that is not only attractive in appearance but has the additional feature of withstanding oil and grease stains.

In the street lighting and general illuminating products there has been a rather definite style trend influenced fundamentally by the development and improvement in illuminating equipment. For example, the development of large capacity electric bulbs has simplified the problem where additional illumination is required. Formerly it was necessary to resort exclusively to clusters of lights where additional illumination was required. This idea has gradually disappeared so that the design has now developed along single light standards with various capacity bulbs to secure the proper gradation. A natural development also has been in the greater elevation of lights and in the production of new types of glass, new tones, etc. Wherever possible, street lighting equipment is designed to the end that it will harmonize with the architecture of the community.

Style Problems and the Industrial Marketer.—Styling has become a very distinct problem in the marketing of many lines of consumer goods. Naturally, the problem must also be dealt with by those who sell fabricating materials or containers to these style-conscious industries. Manufacturers of textiles who sell to cutters-up must produce fabrics which are in style with respect to color, texture, and pattern. An excellent summary of how this problem is met in the textile industry is to be found

in the report, *Merchandising of Cotton Textiles*, by Copeland and Learned. As hand-to-mouth buying grows more and more prevalent, the demands for rapid delivery of style-correct materials can be met only by the manufacturer who has himself studied style trends in the ultimate consumer market. Thus tanners and finishers of leather cannot wait for shoe manufacturers to decide on their styles. They must anticipate the trend of orders. Much has been written about the technique of analyzing fashions and forecasting style trends.

Simplification.—The decade 1920-1930 saw much more attention given to simplification than to diversification. Simplification may be defined as the elimination of those varieties of articles which serve no economic purpose and whose production imposes a burden of higher price upon the articles which have large utility. Many a manufacturer, in keeping his line up-to-date, and in meeting as closely as possible the specific requirements of individual customers, finds that he has increased the number of varieties of his product to the point where the situation is extremely burdensome. In some cases the primary cause of the difficulty is merely failure to drop obsolete items. Articles which are rarely or never sold are permitted to clutter up inventories, to use up valuable catalogue space, and every now and then to disrupt production schedules. For this no complex remedy is required. It is sufficient to clothe some one individual with power to drop obsolete lines, and to keep a record of sales by varieties.

More difficult of solution is the problem presented by the existence of a large number of sizes, patterns, or varieties which differ only in very minor particulars. An engineer in some buyer's plant chooses to specify a machine screw with a slightly different thread or a gear with a slightly different taper. The salesman, anxious to get the order, urges that the product be furnished as specified, and often has his way. Ultimately there develops a very large number of items. The existence of many items means small sales of each. This in turn means increased production costs, especially where machine setup cost is a large factor. If proper service is to be rendered to customers, an inventory of each item must be maintained, resulting in increased cost for storage space and for control of stock. These increases in cost may force higher prices, and thus put either an individual company or an entire industry at a competitive disadvantage.

Simplified Practice Agreements.—It is seldom that a single manufacturer is able alone to adopt a policy of simplification where the multiplicity of items rests on customer demands. Theoretically it is possible for a producer to simplify his own line and refuse to catalogue any items except those which he has adopted as standard. It may be argued that his salesmen should be able to convince customers of the benefits to be gained by altering their requirements slightly to meet the producer's standards. Practically, however, the fact that competitors are willing to provide the exact items wanted often results in a loss of volume for the manufacturer who takes the lead in simplifying. The most significant results have been secured by cooperative action among a majority of the firms in an industry. This joint action was stimulated by the setting up in the United States Department of Commerce of a Division of Simplified Practice. This division has followed a policy of encouraging manufacturers to initiate proposals for eliminating varieties which involve needless duplication. In many instances it assists in surveying the situation and determining the possibilities of simplification. If promising opportunities are revealed, it invites all interested parties to a conference, out of which a list of standard varieties usually develops. The participating manufacturers drop from their regular lines all nonstandard items, making them only on special order and at advanced prices. The result is that users of the product in question ordinarily conform to the accepted standards. This is illustrated by the experience in simplification of paving bricks:¹

In November, 1921, the varieties were reduced from 66 to 11. At that time six varieties represented 70 per cent of the annual output of 210,000,000 bricks. In March, 1922, the varieties were further reduced from 11 to 7. At the end of 1922, the six varieties represented 80 per cent of an annual output of 400,000,000 bricks. In March, 1923, the seven varieties were cut to six. At the end of 1923, the six varieties represented 82 per cent of an annual output of 450,000,000 bricks. In March, 1924, the six varieties were cut to five, and these five represented 88 per cent of the 460,000,000 bricks produced in that year.

Representative of the results of such industry agreements are the reduction in the varieties in solid-section steel sash from

¹ HUDSON, RAY M.: "Promotion of Standards," paper read before executive committee of American Engineering Standards Committee, New York City, Feb. 5, 1925. Reprinted in *Monthly Labor Review*, vol. 20, No. 4., p. 18, April, 1925.

42,877 to 2,244, in standard sheet sizes for paper stock from 1,004 to 7, in standard numbers and widths of cotton duck from 460 to 94, and in sizes and shapes of hotel china ware from 700 to 160. These reductions are naturally advantageous in reducing manufacturing costs. They also help manufacturers materially in reducing inventories and make it easier to render expeditious service to customers.

The Small Concern's Opportunity.—The large concern, making goods in volume and serving a wide market, usually finds it advantageous to simplify its line of products as far as is possible without the need of sacrificing volume. Many small firms serving the industrial market, however, have found that simplification programs have offered them a unique opportunity to specialize in nonstandard items which continue to enjoy a small demand and can be sold at profitable prices. From the economic standpoint, this constitutes an ideal division of the market between these two groups of industries.

Standardizing Quality.—Simplification on the basis of quality standards may offer real opportunities to the manufacturer selling to industry. The Wyoming Shovel Works of Wyomissing, Pa., formerly made many varieties of shovels, mostly cheap lines sold through jobbers on a price basis. The company decided to give up its cheap lines, and standardized on a high-quality shovel which it sold under the "Red Eagle" brand. These shovels were sold on the basis of performance, a new sales argument for shovels. They were at first marketed direct to quantity users and to mill, mine, and contractor supply houses. Before taking this step the company had sold an average of 23,000 dozen shovels a year, largely privately branded, and with many special designs. Eighty per cent of the varieties were unprofitable. In a few years after eliminating all but the one quality line, sales reached 75,000 to 100,000 dozens per year and the total profits of the business were vastly increased. Such instances as this illustrate the need for a continuous check on the profitability of each item manufactured.

Standardized Components.—Another field in which manufacturers operating in the industrial market can often demonstrate merchandising skill lies in the utilization of standardized component parts for their products. Even where market requirements necessitate the manufacture of many varieties of a product, parts and subassemblies can often be made interchangeable. A

manufacturer of lathes, for instance, may be able to standardize on one or a few bed designs and diversify by making many types of heads interchangeable. By so doing, he can not only lower his production costs, but he can be in a position to give quicker delivery on orders, frequently a real competitive advantage. The use of interchangeable parts also facilitates the rendering of repair service, especially where distributors are used. It is hard to get dealers to carry adequate stocks of repair parts. Reducing the investment required and increasing the turnover makes the problem much easier. While such activities fall mainly within the scope of the design department, which is usually attached to the manufacturing division, they must rest on a thorough comprehension of the needs of the market.

Adapting Grades to Market Requirements.—Other important merchandising jobs are the study of the quality requirements of customers and the adaptation of the product to these requirements. It is generally true for most products that different segments of the market give differing weights to the factors of price and quality. Every manufacturer should formulate a definite policy as to what quality level he intends to cultivate. He may decide to cover the entire market, in which case he will offer several products of varying degrees of excellence at different price levels. If he does this, he must be sure that buyers can properly identify the various grades. Otherwise salesmen or dealers may sell a customer the wrong grade, with consequent loss of good will to the manufacturer. The Williamsport Wire Rope Company made six different grades of rope, each tested to stand a certain load. Mistaken use of the wrong grade obviously offered a serious hazard. Consequently the company found it necessary to mark each grade by incorporating in it a single strand of a distinctive color.

On the other hand, a producer may decide to concentrate on a top, bottom, or middle quality. In this event, he must study carefully the needs of the buyers who make up his market. Everyone realizes the lack of wisdom in putting out a product which fails to meet the quality requirements of the use to which it is to be put. More than one manufacturer, however, fails to realize the error, almost as great, of making a product of better quality than is practically useful. One large company, virtually tied by its factory equipment to a policy of mass pro-

duction, employs a strong staff of research chemists. Their work is allowed to point entirely in the direction of developing products of superior quality. The company puts these superior products on the market as fast as they are perfected. As usual the higher quality is obtained only at higher cost. The new products, brought out at higher prices, appeal to smaller segments of the market. The company is rapidly putting itself into the position of neglecting its volume markets, which it is equipped to serve, for a number of small specialty markets which it cannot serve economically. Good merchandising calls for a proper coordination of markets served with facilities for serving them.

Packaging.—A phase of merchandising which is considerably less important in industrial than in consumer marketing is packaging. Nevertheless, the choice of the proper size and type of container is in some cases of real importance in the industrial field. This is particularly true of operating supply items. For such goods as paints, lubricating oils, etc., it is very important to choose package sizes which represent convenient units for purchase, storage, or use. There is some possibility, also, of improving the salability of a product by designing the container for the convenience of the person using it. Some painters working on building maintenance, for instance, insist upon the purchase of ready-mixed paint only in cans with metal handles. Another phase of the general problem of packaging is the reduction of weight of shipping containers, thus saving money for buyer or seller, according to which one pays the freight charges.

Merchandising as a Coordinative Function.—It is apparent that merchandising is essentially a function which coordinates the activities of production and marketing. The control of what is to be made cannot safely be left to the man in the plant. He is likely to be influenced overlargely by tradition, by production costs, and by the desire to utilize existing equipment to the fullest extent. Nor can it be left to the salesman. He is likely to seek the easiest way to make sales. This may involve excessive diversification and the production of many special items based, not on actual needs, but on the whims of a few customers. Consequently most organizations can benefit by setting up merchandising as a separate function in the organization structure. It may involve the part-time services of one man, or it may be a department of considerable size. The man in charge should

generally hold a rank commensurate with that of production manager or sales manager. The main responsibilities of the man in charge of merchandising are:

1. To look ahead into the immediate and the distant future and anticipate what customers will buy; to sense and prepare for changes in demand.
2. To encourage flexibility within the entire organization so that changes can be made rapidly and smoothly when market demand shifts.
3. To promote effective coordination between sales and production.

Merchandising in the Sales Organization.—The establishment of a merchandising division may facilitate the solution of a problem of sales organization frequently faced by large companies doing business over a wide area on a diversified group of products. Such companies frequently have a line sales organization with district managers reporting to a general sales manager, under whom there is a headquarters group of sales managers, each in charge of the sales of a specific product or group of products. This type of organization sometimes leads to considerable confusion. The district sales managers are subject to the pulling and hauling of the product sales managers, each of whom wants the maximum of effort applied to his particular line. The problems of the product sales managers, if carefully analyzed, generally prove to be of a merchandising rather than a sales nature. Segregating the merchandising job permits the maintenance of a strong, centrally controlled sales organization, yet retains the advantages of specialization on product problems as a staff function (see Fig. 25, page 99).

Merchandising and Research.—A very important part of the merchandising job is the effective direction of the company's research and development work. A great deal of money spent in research and in the promotion of new products has been wasted because of failure to secure proper coordination between the technical work and the requirements of the market. Too frequently new products are originated merely in the hope of finding capacity production for otherwise idle equipment, or to attempt to capitalize on some chance discovery in the laboratory. These are worthy objectives, but the amount of money and time spent on specific projects must be correlated with the possibilities for marketing the product which is to be evolved. The type of research which involves the synthesis of market facts into new products involves a degree of coordination between technical research, market research, sales, and production which is very

difficult to effect in the typical business. A company recently spent over a quarter of a million dollars in developing a new product. From the technical end the job was well done. A market research was conducted which indicated a very large potential market for the product. However, when the time came to put the product on the market it soon became evident that competitive conditions limited the price obtainable within a range such that many years must pass before the company could get back the money spent on development. A proper coordination of technical and market research, and proper timing of the two, would have shown that the idea was not worth the expenditure of more than fifty to a hundred thousand dollars in development.

Coordinating Product and Market Research.—A problem which few companies are adequately prepared to handle is that of relating research projects to current business conditions. One company some years ago conceived the idea of developing a product which would be of superior quality, yet lower in price than another article then very extensively used. When the project started, there lay ahead a very large market and highly favorable prospects of profits. However, during the interval required for perfecting the product, outside developments made it possible for the industry which had been the largest consumer of the article to change to a different and decidedly cheaper article. The company in question finally found itself high and dry with a perfectly good new product for which most of the market had vanished, and with the very serious problem of finding some way to get a return on the rather large development expense involved. This might, of course, happen in spite of the best of management. However, in this particular case, and no doubt in many others, a considerable part of the development expense was incurred after evidence of the changed situation should have been available. Several companies which have been through this sort of thing have undertaken to secure a closer coordination of technical and market research. In some cases this is sought through a research committee which studies and approves projects for development work, and which periodically checks all such projects against current conditions. In one fairly large company the entire control of research and development expense is vested in the head of the merchandising department. He maintains a docket of current projects. Each is reviewed monthly. Regardless of technical progress, any under-

taking which loses its attractiveness from the market standpoint is immediately suspended.

Control of Development Work.—From a study of the procedures of many companies in developing new products or new uses, the following general principles seem to exist.

First, there should be a systematic method of bringing together ideas for new products, new uses, or product improvements. All possible sources of such ideas should be covered.

Second, before any considerable amount of money is spent on development work, the project should be qualified by a thorough analysis of the market. The amount of money should be budgeted on the basis of the expected return.

Third, during the period of development, there should be some centralized control of the project, preferably in the hands of one individual. Changes in general economic and market conditions should be watched carefully. If it seems advisable, further work on the project should be suspended or discontinued.

Fourth, before large scale production and marketing operations are undertaken on a new product or new design, a thorough test should be made under actual operating conditions. Such tests may be made either in the plants of cooperating customers or in the plant of the concern doing the development work.

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CHAPTER XV

PRICES AND TERMS OF SALE

Price-making Factors.—The price which a company sets upon its product and the way in which it seeks to collect its price from its customers obviously depend upon many factors. These determining factors vary from industry to industry, and between one company and another in the same industry. Basically, every manufacturer seeks to obtain for each of his products a price which covers all of the direct costs of producing and distributing it, plus its fair share of general overhead expense, such as taxes, depreciation, interest, and the like, plus a profit. The amount of profit to be sought includes two elements: first, a return on the capital invested equal to the going rate of return on investments with no appreciable degree of risk, and second, an additional return commensurate with the degree of risk inherent in the particular business. Each producer naturally has his own idea as to what constitutes an adequate rate of return. Whether a manufacturer will be able to make what he considers a fair rate of profit, whether, in fact, he will be able to make any profit at all, depends on the price which buyers are willing to pay. How much buyers will actually have to pay below the maximum price which they would pay rather than go without the article, depends on the intensity of competition.

Monopoly Price; Competitive Price.—To try to determine prices solely on the basis of cost or investment is not enough. Many manufacturers are in fact selling to their customers, not merely a physical product, but the results of technical or managerial skill. These elements are not subject to tangible measurement, but an alert management will seek to collect as much as possible for them. How far it will be successful depends very largely on the nature of the demand for the product in question and on the competitive situation in the market. Economic theory differentiates between a monopoly price and a competitive price. If a manufacturer has a monopoly due to control of raw materials, of patent rights, or of some other exclusive advantage, he usually

prices his product mainly on the principle of "what the traffic will bear." The article is priced at the figure which will produce for him the highest total profit. In a competitive market, rivalry between producers is supposed to bring the price down to a point which approximates the cost of production of the marginal producer, *i.e.*, the highest cost producer whose output is needed to satisfy the demand for the product. In point of fact, however, almost no producer enjoys a true monopoly. If there is no direct competition, the possibility of substituting one article or service for another almost invariably exists. Neither do competitive prices behave as economic theory describes their behavior, except over relatively long periods of time. Actually, most manufacturers try to secure certain monopolistic advantages within the competitive system. Thus we see continual efforts to develop products which differ in greater or less degree from those of competitors, or to evade outright competition by featuring special services which are not directly comparable.

The Going Market Price.—The average manufacturer can choose between three fundamental price policies. He can endeavor to sell at a price above the usual market level, or at the market, or below the market. To sell above the market requires the development of some form of extra value to the customer, usually extra quality or extra service. In selling to consumers it is frequently possible to secure a price above the market by implanting in the buyer's mind a belief that a product is superior, even though that belief may have no foundation in fact. Considerably less opportunity exists for this strategy in industrial marketing. A producer will usually attempt to secure a price above the market when he believes he can consistently put into his product the necessary extra value at a cost less than the price premium he can get. This policy usually works best with non-standardized items of infrequent purchase, such as plant or office equipment, or with articles which bulk so small in the budget of the average buyer that he does not investigate their worth for himself, but depends on the brand of some reputable producer. The practice of manufacturers of fabricating parts and materials in advertising to create demand among ultimate consumers usually represents an attempt to secure a price above the normal market. For most staple industrial lines the manufacturer can usually obtain only the going market price. In other words, he must base his price on the average price secured by his com-

petitors. There are cases in which a manufacturer can increase his profits by adopting a policy of selling below the market. Many a small concern, unable to spend much for selling and advertising or service, can attract customers and hold them against larger competitors only by accepting a lower price. More often than not, however, a consistent policy of selling below the market marks an inferior product or a poor management not alert to modern marketing possibilities.

Demand Factors.—In determining the price for any product, its manufacturer does well to keep in mind the relationship between his price and the volume he will be able to sell. Inelastic demand is fairly characteristic of industrial marketing. In other words, total volume is usually not markedly affected by any reasonable changes in price. An individual concern might increase its volume by reducing prices if all its competitors would hold to theirs, but in practice it knows that its price reduction will always be met. In the case of those products which do have elastic markets, the producer, before changing his price, must consider whether his business is one in which costs diminish as more goods are produced, or whether each increment of production represents a higher cost per unit. In the former case, policy may well lean toward price reductions; in the latter, common sense dictates a policy of holding to established prices, or even advancing them when opportunity offers.

Uniform or Variable Prices.—An important question is whether a manufacturer shall follow a uniform or a variable price policy. This has two aspects. Shall he try to hold his price at a stable figure from month to month and year to year? Shall he at any one time have only one price basis, or shall he determine his price for each transaction by bargaining with the customer? For a manufacturer to hold his price at a constant figure through good times and bad has certain advantages in stabilizing his business. In particular his customers or distributors are encouraged to maintain normal inventories and to purchase at a normal rate. There is no rush to stock up when a price advance seems in order, nor is there need for hand-to-mouth buying in anticipation of a decline. This policy is not open to everyone. If direct costs of material and labor account for a major part of the selling price, uniformity of price over any prolonged period is out of the question. If, however, overhead and gross margin bulk large in the sales dollar, a consistently maintained price level may prove decidedly beneficial.

The One-price Policy.—In retail trade most merchants have learned the advantages of a one-price policy, and practice it with only a few exceptions. Bargaining between buyer and seller still plays an important part in industrial selling, even on merchandise which is perfectly standardized. Much has been said about the "chiseling" practices of purchasing agents who have played one buyer against another, and who have adopted various subterfuges to beat down the prices quoted by their suppliers. The fundamental trouble has not been with the purchasing agents so much as with the spineless price policies, or lack of policies, of many vendors. It is the purchasing agent's job to buy for his company at prices at least as low as those paid by any competitor for goods of equivalent quality. If he suspects that the price quoted him is not the vendor's bottom price, he is only doing his duty to endeavor by any ethical means to get down to the true bottom price. Considering that his job may be at stake, it is not surprising that once in a while a buyer descends to tactics which verge on the dishonest. Any vendor who permits price differentials between customers, other than those based on some well-defined and publicly announced principle, may expect continuous pressure against his price structure. If the pressure goes farther than he likes, he has only himself to thank. This practice of haggling on price has a deleterious effect on the morale of the sales force. The salesman whose firm does not adhere rigidly to its price structure is all too likely to devote his talent to selling his employer the idea of giving his customer a price concession instead of selling the product.

Trade Discounts.—The generally accepted bases for price differentials between buyers are services rendered in distribution and quantity purchased. The trade discount represents a recognition of the services performed by the jobber or other middleman. It may vary with the extent or value of the functions performed by particular classes of distributors. Some companies, for instance, will give a special trade discount to distributors who will agree to carry a full line or to maintain complete stocks of repair parts. An agreement to maintain a special salesman to concentrate on the vendor's line may be the basis for an extra trade discount. Distributors' average cost of doing business plus a reasonable profit furnishes a good basis for setting discounts. If trade discounts are maintained at too low a figure there is difficulty in getting the goods stocked or in

getting adequate selling support. If discounts are too high, there is an ever-present temptation for the distributor to cut the price to attract business from his competitor. This provokes retaliation and possibly a price war, which almost always results in detriment to the business of producer and distributors alike.

Jobber Protection.—The problem of setting trade discounts is closely allied with the problem of protection for distributors. When a manufacturer sells to the industrial market through jobbers or other intermediaries, it is usually because that is the most economical way for him to sell his product. At the same time, it frequently happens that the manufacturer desires to solicit directly the business of certain customers in the distributor's area of operation. If the purpose is merely to stimulate the jobber's activity, the latter's price should be protected. In other words, the customer buying direct should be charged the same price as if he had bought through the jobber. In many cases, however, the manufacturer wishes to take the business at a price which the distributor cannot meet. Here is a fruitful field for conflict between producer and jobber. Disputes can best be avoided by agreement on a definite policy. A large paper manufacturing company found itself in frequent conflicts with its jobbers over sales of kraft paper to the industrial market. It finally laid down the policy that all business on paper for wrapping or case-lining purposes should be regarded as belonging to the jobbers. The company reserved the right to take such business direct but agreed to protect the jobber's price. On sales for conversion, however, the company proposed to take orders at a price below any which the jobber could meet. The latter understood that any such business which he developed might be taken by the company at any time, although in practice it was not taken over until the jobber was in danger of losing it to a competitor. The rigid maintenance of this policy was a decided aid in keeping distributor relations on an amicable basis. Protecting the distributor, however, sometimes means the renouncing of desirable business. The company mentioned above sold a considerable amount of its product to a large converter. On one occasion an order came in from this firm for a carload of case-lining paper. Through some carelessness, this order went through at the price charged the jobber. The local jobber learned of the transaction and protested. On the subsequent order, therefore, the manufacturer was obliged to quote a price

which included an amount equal to the jobber's margin, and the business was lost. In industrial marketing as everywhere else, it is impossible to eat one's cake and have it.

Quantity Discounts.—Discounts are very commonly granted on the basis of quantity purchased. This practice is based on the assumption that large orders are cheaper to handle than small ones and that the large purchaser is entitled to part of the savings. In the last analysis, quantity discounts are used as a part of the general sales strategy, sometimes to gain an advantage over competitors by inducing customers to confine their purchases to a single source, sometimes to reduce selling costs by stimulating purchases in larger quantities. If used for the latter purpose, it is important that the discount shall not exceed the saving in cost which results from handling larger orders. This, however, is difficult to measure in many cases. There is a clear cost differential between carload and less-than-carload business, particularly when the seller pays the freight. Between smaller lots, the saving is often not easily defined.

Variations of the Quantity Discount.—In using quantity discounts as a competitive weapon, it is not so essential that the amount allowed parallel the savings effected. Much depends upon the way in which the discount is given. The simple noncumulative discount which applies to a quantity of goods bought at a single sale for a single shipment is most common. This sort of discount may be planned so as to induce the average buyer to stock up for a predetermined period, so that he is out of the market between visits of the vendor's salesman. Much less common, but also more significant as a competitive weapon, is the cumulative discount, which applies to all goods bought or shipped within a specified interval of time. All quantity discounts and particularly cumulative discounts tend to favor exclusive purchasing. Where a sliding scale of quantity discounts is employed, the purchasing agent who divides his requirements among two or more sources is likely to find himself paying a higher price than if he buys from a single vendor. If the discount applies to the single order, the buyer may alternate his orders among suppliers without any loss of discount. If the vendor who receives the first order uses a cumulative system of quantity discounts, however, the purchaser has a strong incentive to give his future orders to the same supplier until the end of the discount period, as he then qualifies for the maximum discount.

Combining Trade and Quantity Discounts.—Trade and quantity discounts are frequently used in conjunction. The trade discount represents the degree to which each class of distributors performs necessary marketing functions. The wholesaler who undertakes an exclusive agency for a definite territory and does a real selling job will normally receive a higher discount than the jobber who merely fills orders. The distributor who maintains a warehouse stock gets an additional discount over one who depends on the manufacturer for drop shipments. There may be several levels of discounts given for position in trade. On these we frequently find superimposed a scale of discounts for quantity purchased. In such cases as this, it is ordinarily considered good policy to see that discounts given for quantity are restricted so that the largest purchaser in the lower discount trade group cannot receive a larger allowance than the smallest purchaser in the next higher trade-discount group.

The Cash Discount.—The cash discount is practically universally used in industrial marketing. Each trade has its own practice. The commonest terms are 1 or 2 per cent allowed for payment within ten days from date of invoice or by the tenth of the month following shipment. Terms of 2/10 net 30 represent an allowance of 2 per cent for anticipating the due date by 20 days, or an interest rate of 36 per cent per annum. Cash discounts are largely a matter of trade custom, but they do have certain real advantages. They encourage prompt settlement of accounts, and thus save bookkeeping and clerical expense. They also make it possible for the selling concern to turn over its funds more rapidly, and thus enable it to get along with less working capital.

Discount Structures Often Complex.—In many lines discount structures are exceedingly complicated, especially where several sliding-scale discounts are given for various reasons. Competitors frequently have used different bases and different scales. In such cases it is often difficult for the purchaser, particularly the small business man, to compute the relative economy of the various prices quoted to him. Special discount tables and slide rules have been developed to simplify this problem. They are useful to salesmen as well as to purchasing agents and accounting departments.

List Prices.—This complexity is often increased by the practice, common in many lines, of setting standard list prices. These

are likely to be purely nominal, perhaps representing the highest figure which the final user buying in the smallest quantity will ever be charged. The effective price at any time is the list price less the overall, trade, quantity, or other discounts which may apply in a specific transaction. When a line includes a large number of items, price quotations are facilitated and the clerical work involved in price changes is lessened by the list-less discount plan. There is no need for preparing extensive new price schedules or catalogues. One notification of a changed discount rate may change the price of dozens of items. There is less chance of confusion occurring through use by salesmen or distributors of price lists which have been superseded.

Freight Equalization.—There are various other forms of price concessions which are not based on economic services performed, or on economy in selling, but simply represent attempts to increase the total volume of business by taking orders otherwise unobtainable at less than the prevailing price. One of the most common plans in industrial marketing has been the equalizing of freight charges. Where the prevailing basis of quoting prices is f. o. b. point of production, and freight constitutes an appreciable item of cost to the user, the normal result is to limit the geographical area in which any producer can compete. The manufacturer who finds difficulty in securing enough orders to fill his plant in his own natural territory may seek to enlarge his volume and his profit by selling to users in the natural territories of his competitors. To get this business he must rebate to these users a sufficient part of the actual freight cost so that the customer pays no more for the goods delivered than if he had bought from the nearest producer. This is a practice which clearly invites retaliation and ultimately leads to a great deal of uneconomic crosshauling of freight.

In many cases attempts are made to screen price discrimination in favor of what may be termed "marginal" customers. They may be given special datings which defer the time of payment. This amounts, in essence, to a price reduction to the extent of the normal interest charge for the extra period of credit. To permit a customer to deduct the normal cash discount after the specified period has expired is a discriminatory price concession.

Anticipatory Discounts.—In many instances special prices are extended to buyers who will anticipate their requirements. A

manufacturer can usually operate more economically if he can plan his production in advance. He is often willing, therefore, to grant price concessions to customers who will place their orders early enough to facilitate this advance planning. A very large proportion of the business in standardized materials and parts is done on a contract basis. For most industrial chemicals contract prices are definitely quoted at a slightly lower figure than spot prices. The price concession represents the lower degree of risk which the producer must assume. In many cases an additional indirect form of price concession is granted, in the guise of a price guarantee. The advance purchaser loses his ability to take advantage of market fluctuations. To compensate for this, the producer frequently agrees that the buyer shall be billed at the contract price if the market advances and at the market price if it declines.

Effect of Price Reductions on Profit.—In setting prices and in the granting of price concessions of one sort or another a factor which is frequently missed is the effect on profit of varying the price. When volume of sales begins to fall off, or when competitors lower their quotations, the instinctive thing is to try a price reduction. Sometimes this is the proper course to follow. Certainly when the competitive situation calls for lower prices they should be put into effect without hesitation. But in very many cases, especially with industrial goods which are not too highly standardized, and where quality and service are important

TABLE XI

When the price is cut	Unit volume must be increased when original margin is:				
	30 %	33 $\frac{1}{3}$ %	35 %	40 %	50 %
5 %	20 %	18 %	17 %	14 %	11 %
10	50	43	40	33	25
15	100	82	75	60	43
20	200	150	133	100	67
25	500	300	250	167	100
30	.....	900	600	300	150
33 $\frac{1}{3}$	.....	....	1989	500	200
35	.....	....	....	700	233
40	.....	....	....	....	400
45	.....	....	....	....	900

buying motives, it is more profitable to let volume fall off somewhat rather than to rush precipitately into a price cut. The preceding table, reproduced by the courtesy of Mr. Allan Rucker, shows clearly the relation between volume, margin, and price.

One manufacturer used this line of reasoning to advantage when faced with a 20 per cent price reduction by competitors in the early part of 1932. Salesmen urged that the reduction be met. A study of the situation, however, gave grounds for the belief that 75 per cent of the existing business could be retained at the old price. This loss of volume would reduce profits less than half as much as the contemplated price cut. In such a case, of course, much depends on the nature of the company's costs. If they are mostly direct (*i.e.*, variable with volume, as materials, direct labor, salesmen's commissions, etc.), then it is often well to hold prices up as far as the competitive situation will permit. If costs are mostly fixed (*i.e.*, irreducible items like interest, taxes, rents, overhead salaries, and wages), it is usually desirable to maintain volume at the highest possible level.

Consignment Selling.—While the ordinary transaction in industrial marketing involves an outright sale, there are many instances in which the manufacturer retains title to the goods while they are in the hands of distributors, and a few cases where title is retained throughout the life of the product. In the former, consignment selling is used; in the latter, the product is leased. There are a number of reasons for putting goods in distributors' hands on consignment. With expensive machinery, manufacturers' agents may be financially unable or unwilling to pay for machines for showroom demonstration. It is frequently difficult to induce jobbers and supply houses to carry complete stocks of repair parts necessary to afford prompt service to users. Many repair-part items turn over slowly, and distributors dislike to tie up capital in them. By consigning stocks the manufacturer can make sure that his customers can always secure parts from local dealers. In a few instances, particularly with operating-supply or accessory-equipment items, consignment selling is used to insure that a product is resold at the price which the manufacturer desires to maintain. While the problem is not so common in industrial as in consumer marketing, price cutting by distributors may undermine the market for a product. Where a dealer purchases goods outright, it is not permissible to require him to agree to maintain a suggested resale price. The

manufacturer may always refuse to sell to a price-cutting dealer but there are instances where this course is not expedient. If goods are shipped on consignment, however, title remains in the manufacturer. The distributor is merely his agent, and may be required to sell only at the price set by the manufacturer. To some extent, also, consignment selling has been used where goods can only be sold through outlets of doubtful financial strength. Since consigned goods remain the manufacturer's property, he can reclaim any of his goods remaining unsold if a distributor goes into bankruptcy. This is a somewhat safer position than that of a general creditor.

Difficulties of Consignment Selling.—Consignment selling has its very definite drawbacks. In the first place, it requires that the manufacturer be able to assume the financial burden of carrying all stocks. It also places upon the producer all the risks of deterioration of the merchandise (except as it may be caused by the consignee's negligence), of changes in demand, and of changes in the price level. There are real problems and some expense involved in keeping track of stocks in distributors' hands and insuring that settlements for goods sold are made promptly. Laxity in regard to settlements for consigned goods permits the distributor who is so inclined to use the manufacturer's capital in his own business. If a distributor fails, having sold a considerable volume of consigned merchandise for which he has not settled, the manufacturer becomes a general creditor for the amount of cash due him. Beyond these factors, there is a good deal of evidence to indicate that the average distributor is more inclined to push the sale of goods for which he has paid than those which he has on consignment.

In periods when credit is scarce and sales volume small, consignment selling often becomes a formidable competitive weapon of well-financed companies against weaker competitors. If a distributor is given the choice of buying one line of goods outright or of securing an equivalent and equally acceptable line on consignment, the distributor who is short of working capital will usually choose the latter. The manufacturer whose limited financial resources force him to sell outright may be virtually forced out of many desirable outlets. Because of this there has been a great deal of denunciation of consignment selling as an unfair trade practice.

Leasing of Equipment.—In a few cases expensive items of industrial equipment are leased to users instead of being sold

outright. The most notable exponent of this practice is the United Shoe Machinery Company, although such products as tabulating machines, packaging machinery, and construction equipment are also offered on a rental basis. Leasing is usually done by the manufacturer, although in the construction industry dealers frequently purchase equipment from manufacturers and rent it out to contractors. In the railroad field, likewise, equipment trusts purchase rolling stock and lease it to the carriers. The contractor who leases equipment usually expects to use it only during a specific job. The average lease contract on industrial machinery contemplates that the lessee will use the equipment as a permanent part of his business. Leasing, in other words, is ordinarily a method of sale in which payment, instead of being made outright, is collected over a period of years. It usually takes the form of a royalty per unit of production or of a flat rental per period of time. Shoe-machinery leases call for a specified royalty per pair of shoes produced, ditching-machinery leases for a definite sum per cubic yard excavated. The International Business Machines Corporation leases its Hollerith tabulating machines on a monthly rental basis. A contract may carry a minimum charge provision which insures the lessor of some return even though the lessee uses the equipment very little. The same end may be achieved by giving the lessor the right to withdraw the equipment if he can put it to more profitable use elsewhere.

The lease method finds its best field of employment in cases where a producer of expensive equipment has strong patent protection with little indirect competition. If the producer has a practical monopoly on the supplies used by the equipment his position is even stronger. By setting a nominal rental fee based on time and including a royalty for the machinery in the price charged for the supplies, he may secure an excellent income and at the same time avoid the difficulty frequently encountered in checking up on the extent to which the lessee uses the equipment. Sometimes equipment which is not patentable is leased because of the existence of a monopoly on the supplies which the equipment uses. Thus the Addressograph Company has leased its addressing machines, controlling the plates which are used with it. Can manufacturers lease machinery for closing cans in order to secure sales of the cans. Leasing of equipment may also be employed as an adjunct of the sale of service, as is done by the

telephone companies, which in effect lease instruments and switchboards. Where equipment is extremely complicated and requires expert repair and adjustment service, its manufacturer may choose to make it available only on a rental basis so that he can retain control of the servicing and thus insure the maintenance of his product's reputation.

Advantages of Leasing.—The fundamental motive of most manufacturers who use the lease system is to obtain the maximum profits under patent monopolies. Most manufacturers would be unwilling or unable to pay outright as high an amount as they will pay in the course of a long-term royalty lease arrangement. It is easier, also, to induce prospective customers to install new equipment on a rental basis. As with the trial installation plan, they can try out the product and return it if it proves unsatisfactory. The producer of a radically improved machine may saturate the market in a relatively short time if he sells outright and thus have left no continuing source of revenue. By leasing the machines he insures for himself what may be a highly lucrative market in supplying repair parts and service. This continuing revenue may be used to finance research work looking toward further patentable improvements which will perpetuate the monopoly. Since obsolete equipment may be withdrawn at any time and replaced by new and improved types, a monopoly can often be extended as long as the producer's research department can develop important improvements which can be protected by patents. Some lease contracts are drawn to provide that all improvements made by persons using or operating the equipment become the sole property of the lessor.

Problems of Leasing Arrangements.—Only the equipment manufacturer who has very ample financial strength or enjoys an excellent market for his long-term securities can effectively follow the policy of leasing. The financial load is heavy, for the return is spread over a long period of time. The lessor must take all the risks of obsolescence. His income is likely to fluctuate with the business cycle. If his leases call for a royalty per unit of output, his return varies with his customers' rate of production. If he charges a monthly rental, customers may return his machines and he may have difficulty in getting them into use elsewhere. There is the danger that rented machines may be used carelessly, involving heavy repair expense. This, however, may be avoided if the contract is so drawn that the customer pays

for necessary repairs. The manufacturer who leases equipment must usually maintain a rather expensive service department for the periodic inspection and adjustment of his equipment. Otherwise it may fail to give satisfactory performance. The return of equipment by lessees not only cuts the producer's revenues, but may injure his reputation. When rentals are based on variable factors, such as units produced, savings effected, etc., a considerable burden of accounting work is thrown on the lessor in order that he may be sure that proper payment is being made. Sometimes counters or other recording devices can be attached to the equipment. In other cases, audits of the lessee's production records may be necessary. In any event, the job of checking payments requires a large and expensive organization.

There are other difficulties involved in a policy of leasing equipment. In an industry made up of large and well-financed concerns it will usually be found that customers prefer to purchase outright and control their own equipment. They are likely to be particularly hostile to a leasing plan which makes it easy for small and perhaps uneconomic competitors to enter the industry. Leasing does inevitably tend to encourage a condition of excess productive capacity. Where the hostility of large manufacturers is not a factor, however, it may be to the interest of the equipment producer enjoying a patent monopoly to stimulate overcapacity and overproduction. The natural result is lowered prices to consumers of the goods produced by the equipment, hence increased consumption and larger royalties to the equipment maker.

Taking Securities in Payment.—The problem of selling expensive equipment to concerns which are not in a position to pay for it on a short-term credit basis has at times been handled by the acceptance by the seller of notes, bonds, preferred or common stocks of the purchasing concerns. This was at one time done to a very considerable extent in the sale of improved equipment to the textile industry. One large producer of electrical equipment has in recent years accepted large amounts of public utility stocks as payment for its products. This method of selling industrial equipment is obviously open only to those companies which can raise funds in the capital market on advantageous terms.

Installment Sales.—A more common method of handling large sales of industrial equipment to buyers who do not have unlimited

access to capital funds is selling on the installment plan. Fundamentally, this involves payment out of income rather than from capital. Just as in the case of consumer installment credit, it permits the buyer to have the use of the equipment while he accumulates the funds with which to pay for it. As a matter of fact, it is not uncommon for new equipment to save enough in costs or to increase earnings sufficiently to pay for itself within the credit period. The availability of such a method helps to expand the sales of major and accessory equipment and to stimulate the attainment of a higher general level of technological development. From the economic point of view, it unquestionably operates to reduce the disparity between the large and the small producer. It may, of course, help to promote uneconomic expansion of productive capacity.

A list of the types of industrial equipment which has been sold on the installment plan includes the following:¹

- Amusement equipment.
- Automotive equipment.
- Bakers' and confectionery equipment.
- Barber and beauty-parlor equipment.
- Boilers and tanks.
- Bookbinding machinery.
- Bottling and glass machinery.
- Butchers' equipment.
- Canning machinery.
- Cigar and cigarette machinery.
- Combustion equipment.
- Concrete-mixing machinery.
- Contractors' equipment.
- Dairy equipment.
- Diesel engines.
- Dental equipment.
- Electrical appliances.
- Electric furnaces.
- Electric motors.
- Excavating machinery.
- Farming machinery.
- Floor-waxing machinery.
- Flour-mill equipment.
- Foundry and steel machinery.
- Gas and oil engines.
- Hat-blocking machinery.

¹ H. B. Lewis, Vice President, Commercial Credit Corporation, in a paper presented at the Industrial Marketing Conference of the American Management Association, Cleveland, Ohio, Nov. 12, 1931.

- Heating systems.
- Hoists, cranes, and conveyors.
- Hotel equipment.
- Ice machinery.
- Irrigating equipment.
- Laundry machinery.
- Machine tools.
- Marine equipment.
- Mill supplies.
- Mining equipment.
- Oil burners.
- Oil-mill equipment.
- Oil-well equipment.
- Package-wrapping equipment.
- Paper-mill machinery.
- Physicians' equipment.
- Printing machinery.
- Projecting and sound-reproducing equipment.
- Pumps and compressors.
- Refrigerators.
- Road machinery.
- Rubber-specialty machinery.
- Sewing machinery.
- Shoe-manufacturing and repairing machinery.
- Soda fountains.
- Spraying and fumigating equipment.
- Store fixtures.
- Stoves and ranges.
- Textile machinery.
- Woodworking machinery.

Installment selling is naturally more prevalent in the case of equipment used in industries where small concerns predominate and where large financial reserves are the exception rather than the rule. It is estimated that 90 per cent of all soda fountains and drugstore equipment, 50 per cent of all steam shovels, 70 per cent of printing machinery, and 55 per cent of all Diesel engines sold in 1930 and 1931 were financed on the installment plan.¹

Special-purpose machinery designed solely for the plant in which it is to be used is seldom sold on installment terms, although there are instances on record where this has been done. Equipment which finds use only in very large plants is usually sold on the customary 30-day terms, since such buyers normally

¹ *Ibid.* •

have or can easily raise the cash required. A questionnaire to forty machine tool dealers, circulated by Alvin B. Einig, General Manager of Motch and Merryweather Company, in 1931, disclosed that 10 per cent of their sales of machine tools were financed by installment credit.

Preliminary Investigation.—Installment paper may be handled by the manufacturer, or the dealer, or by a finance company. Whoever does the financing, there are certain definite principles which must be observed. In the first place, the article purchased must be capable of profitable use by the buyer. An extensive engineering investigation is often necessary to determine the prospective earnings or savings of the new equipment. This investigation is usually paid for by the seller or the finance company, and the expense may be absorbed in the price charged for the product or in a special financing charge.

Down Payment.—The amount of the down payment is a matter of considerable importance. The lower it can be set, the wider the market which is opened up. On the other hand, too low a down payment may stimulate uneconomic installations and result in a high proportion of unprofitable repossession. In theory, the down payment should at least be sufficient to cover two-way freight charges, installation and removal costs, insurance, and the difference between the resale price of used equipment and the price when new. To this it may be advisable to add in some cases commissions paid to salesmen, agents, or dealers which are not recoverable in the event of repossession. The safe minimum down payment will thus depend largely on the existence of a ready resale market and a fairly stable price for the used equipment. The credit standing of the purchaser and the financial status and prospects of his business may modify the amount of down payment required. In practice, down payments have ranged from purely nominal amounts up to about 50 per cent, with the range from 20 to 33½ per cent most commonly employed.

Rate of Payment.—As a general rule the recoverable value of equipment sold on installment credit should never be permitted to fall below the balance due. Carelessness on this point may lead to excessive repossession, with a considerable loss on each. Beyond this, the seller of course desires to collect his price in the shortest possible time. Lewis¹ recommends that the seller plan

¹ *Ibid.*

to collect annually at least one-third of the annual savings or increase in earnings expected to result from the sale of the equipment, and that the period of payment should not exceed one-quarter of the estimated productive life of the equipment.

Types of Installment Paper.—The credit instruments used in installment transactions vary in nature and form according to the laws of the various states. Most common is the conditional sales contract or agreement, under which the seller retains title until payments are complete. A default in making the agreed payments automatically gives the seller the right to repossess without the necessity of securing a court judgment. In some states leases are used, with an agreement to transfer title when payments have been completed. In still other instances chattel mortgages are used. It is extremely important that the form of the installment agreement be in accord with the laws of the state in which the transaction takes place.

Finance Companies.—The manufacturer or dealer who sells industrial equipment on the installment plan often finds it helpful to utilize the services of finance companies which specialize in handling this sort of credit. When this is done, the seller assigns his title to the finance company, keeps the down payment, and receives from the finance company the unpaid balance, from which is usually deducted a reserve of 10 per cent or more. This reserve serves as a margin of protection for the finance company, and is paid over to the seller when the last note is paid. A special charge for financing is usually added to the total of the notes signed by the purchaser.

The finance company, in arranging to handle a manufacturer's installment paper, usually sets a definite limit to the amount which it will carry. This is ordinarily figured as a direct ratio to the seller's combined capital and surplus. It is always required that the manufacturer guarantee his product. In most cases he is also required to assume contingent liability for his customers' paper so that in the event of a default the finance company can call on him to repossess. Where a manufacturer sells through dealers, the finance company usually requires the endorsement of customers' paper by both maker and dealer.

The advantages of using a finance company to handle such transactions are the ability to get along with a much smaller amount of capital, and the relief from the burden of credit investigation and collection work in this highly specialized field.

On the other hand, however, turning this business over to an outside concern involves the risk that the customer may not receive the degree of consideration which the seller might desire. The finance company naturally has a banker's attitude toward the transaction; its principal concern is security and prompt collection.

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CHAPTER XVI

CREDIT AND COLLECTION

Universality of Credit.—Practically every transaction in industrial marketing involves the extension of credit in one form or another. In the vast majority of cases the seller delivers the goods to the buyer, relying on the latter's promise to pay at a specified future time. In a few cases, sales are made c.o.d., but even here some credit risk is involved if checks are accepted in settlement. The seller who is paid by check assumes the risk that the drawer actually has sufficient funds in the bank, that these funds are not otherwise attached before the check is collected, and that the bank remains solvent. These risks are largely hypothetical, but every now and then a seller is surprised to find himself involuntarily made a creditor of a customer with whom he intended to do business on a cash basis. In most trades a 10-day settlement is assumed to be "cash," and a cash discount is allowed. In actual fact, the use of the word "cash" is of course a misnomer, as it merely represents a shortening of the term of credit. Since practically every transaction involves the actual or potential granting of credit, it is extremely important to every business that the principles governing credit and the rights of buyers and sellers be understood by all sales executives and salesmen.

Credit in Sales Strategy.—The extension of credit is not merely a problem involving possible losses. It frequently plays a vital part in competitive strategy. As a rule each trade has its own characteristic credit period. This may be long or short, according to trade customs, the relative financial strength of buyer and seller, or the time which it takes for the buyer to turn over the merchandise. An individual manufacturer sometimes finds it advantageous to offer longer credit terms than are customary in the trade. Particularly in times of poor business, he may be able thereby to attract customers from his competitors. This is somewhat analogous to price cutting. If competitors are financially able they will match the new terms,

the initiator's advantage will disappear, and the whole industry will be saddled with the burden of carrying customers for a longer period. Where competitors are poorly financed, however, they are less likely to be able to follow such a move than to meet a price cut. In several recent cases desirable dealers have been picked up by concerns able to offer them exceptionally long credit terms. In good times this procedure is not particularly effective. Under favorable conditions worth-while customers will discount their bills. Extension of longer credit terms is likely to result in demands for larger cash discounts, and may consequently be translated into a price reduction.

In some cases the practice of granting advance datings may be used to smooth out seasonal fluctuations in sales. A producer of packages for jewelry manufacturers finds that he can induce them to place their orders earlier if they are not billed until the normal time for buying. In a few cases, the extension of longer credit terms has helped to solve the small-order problem. Extreme hand-to-mouth buying often reflects a condition of inadequate working capital among buyers. If granted credit for 60 or 90 days instead of for 30 days, they can frequently be induced to make larger purchases at one time, thus cutting down both sales force and warehouse expense for the seller.

Customer Relations.—The methods used in passing upon credits and collecting accounts are tremendously important in their effect on a concern's good will. Prompt and tactful handling of credit matters helps to hold customers; neglect and discourtesy will alienate them faster than almost any other shortcoming. A recent instance which has countless duplicates illustrates the point. A salesman, after months of effort, had secured an initial carload order from an important customer. The seller's weight shown on the invoice did not agree with the buyer's weight as recorded upon arrival of the car. Payment was held up pending adjustment. Before the salesman could visit the customer's plant, the seller's credit department began pressing for payment. An acrimonious correspondence ensued, which resulted in the purchasing agent's decision to give the company no more orders. In another instance, again easily paralleled, an initial rush order from one of the nation's largest corporations was held up for several days waiting for the seller's credit department to approve it. Future orders again went elsewhere. Such difficulties as these are of course absurd. The fact that they occur

all too frequently demonstrates the need for a smooth-working coordination between the activities of the sales and credit departments.

Relations between Sales and Credit Departments.—Failure to achieve a proper measure of cooperation between the two departments not only leads to loss of customer good will, thus affecting volume and profits, but it also has a deleterious influence on sales-force morale and on selling expense. The salesman who has secured an order from a new customer, only to have the credit manager turn it down, is naturally disgruntled. Even if the credit man is right, time and money have been wasted in soliciting business from an ineligible prospect. The responsibility for such a situation rests jointly upon the two departments. If the sales manager is wise, he will have the credit department check the desirability of the firms whose business he proposes to solicit. If there are so many prospects that salesmen must be left to develop them by cold canvass, the salesmen may be furnished with pocket credit-rating books and instructed to call only upon firms of a specified rating or better. They can be given to understand that the responsibility is theirs if they accept orders from unrated or poorly rated firms except on a c.o.d. basis. Making the sales force conscious of the credit problem usually has a decided effect in reducing the number of cases in which orders must be turned down by the credit department. In its turn, however, the sales department is entitled to ask that the credit manager and his staff recognize the importance of sales volume. Decisions on granting credit should be handled expeditiously and without undue red tape. Collection of overdue accounts should not be undertaken without clearing with the sales manager. There is no reason why cooperation between the two departments should interfere with the proper operation of either.

Risks of Credit Granting.—Every seller in extending credit to his customers necessarily assumes certain risks. He must speculate on the buyer's honesty and also upon the latter's ability to meet the debt when it comes due. He must decide how much credit may safely be granted to a specific debtor. He must also gauge closely the total amount of credit risk which he assumes in relation to the working capital of his business. Even if all his accounts are ultimately collectible in full, the extension of too much credit may put the seller in a condition of temporary

insolvency. The skill with which all these risks are administered has much to do with the success of every business.

Work of the Credit Department.—It is possible, of course, for an enterprise to avoid practically all credit risk by selling only to buyers of unimpeachable reputation and unquestioned financial strength. In many lines of business, however, this policy would virtually preclude any hope of securing a profitable volume of sales. At the other extreme, the unrestricted granting of credit will lead to a large increase in sales volume, but may so increase bad-debt losses as to more than offset the profits from the added volume. One minor part of the credit job is to set up a routine for expeditious handling and approval of those accounts which are clearly good risks. Another routine may be set up for the rejection of obviously bad risks, where dishonesty is indicated or where insolvency is imminent. The real work of the credit department is to deal with the doubtful cases, which present dual possibilities of profit and loss. A balance must be struck in each case between profit and risk of loss. In many cases the company's need for business will be an important factor. It may at times seem good policy to extend credit to customers whose financial condition looks shaky. In some trades volume can only be secured by granting credit to customers whose honesty is somewhat in doubt. Where it seems desirable to enter into risky transactions, they may often be handled in such a way as to give the seller greater safeguards than would ordinarily be employed. In many cases some special form of security for the debt is required. In others, the seller may undertake to retain title to the goods as long as possible.

Forms of Credit Extension. *The Open Account.*—The ordinary form of commercial credit is the open book account, in which the only written evidence of the debt is the entry on the seller's books debiting the amount of the transaction to the buyer. This is sufficient in practically all cases. If legal proceedings become necessary, as they may if the buyer denies the debt, or if there is dispute about the amount, or if the debtor goes bankrupt, the burden of proof of his claim must be borne by the seller. He can usually provide adequate proof by means of the buyer's order, his own invoice, freight receipts, and similar evidence. Nevertheless, when a customer's honesty or solvency is in question, some better form of obligation is usually sought. Some concerns with limited working capital desire to borrow as much as

possible on their accounts receivable. They may find that they can borrow in a higher ratio to their assets if these are in more readily negotiable form.

Drafts.—A draft is an instrument drawn by one party, called the drawer, which orders a second party, the drawee, to pay to a third party, the payee, a definite sum of money. Drawer and payee may be the same person or firm. A "sight draft" is one which is payable on presentation, or within a specified number of days thereafter. A "time draft" calls for payment on a specified future date. To a customer of doubtful credit standing shipment may be made on the basis of "sight draft against bill of lading." The seller draws on the buyer for the amount of the sale, attaches the draft to the bill of lading, and sends the documents to a bank or other representative in the buyer's town. The bill of lading, which carries title to the goods, is turned over when the draft is paid. Drafts are also quite commonly used in the collection of past-due accounts. Some debtors are inclined to let open accounts go unpaid as long as possible, thus in effect using their creditor's cash in their own businesses without payment of interest. If the creditor sends a draft through the debtor's bank for collection, however, the debtor cannot fail to meet it without considerable embarrassment. The use of drafts does not always imply the existence of poor credit or dilatory settling. In some trades they are the customary means of handling transactions. Thus a flour mill will always draw on a baker when it has sold him a carload of flour.

Trade Acceptances.—A trade acceptance is a time draft which has been accepted by the drawee by signing his name across the face of the draft. By the act of acceptance, the purchaser admits the debt and the correctness of the amount. The seller may if he desires discount the trade acceptance at his bank. The bank may in turn rediscount it at the Federal Reserve Bank, which in its turn may issue Federal Reserve notes against it. By the use of acceptances a seller may ordinarily borrow a higher proportion of his receivables than is possible with open book accounts. The quality of the credit risk is not, of course, improved by the use of the acceptance. The seller, in discounting it, becomes liable as an endorser in the event that the buyer fails to pay at the due date. There has been considerable agitation for the general use of acceptances in place of open

accounts. The movement has not had the degree of success anticipated by its sponsors. One reason may be the prevalence of hand-to-mouth buying. It is more convenient to carry many small invoices in an open account. Buyers sometimes object to acceptances because they must accept before the goods are received and before they have an opportunity to inspect them and check quantities.

Promissory Notes.—A promissory note is an agreement to pay a specified sum of money on a specified future date, with no conditions attached. Such a note has certain definite advantages. It establishes the debt beyond question, once it has been shown that it was given for a consideration. Disputes as to the terms of the transaction are eliminated. It is usually rather easy to compel prompt payment unless the debtor is insolvent. Finally, the note may be discounted by the holder, or otherwise used in trade, since it is fully negotiable by endorsement and delivery. When there is doubt about a customer's financial condition, creditors will often insist on promissory notes, which give them the right to force collection at the specified time. Sometimes in making sales to doubtful risks, sellers will require the endorsement of someone of more satisfactory responsibility who becomes liable if the drawer of the note fails to pay. Thus a small subsidiary may be required to secure the endorsement of its parent company in order to secure credit for a large purchase. A corporation in an unstable financial position may be required to give notes personally guaranteed by its officers. Such notes are known as "two name paper." Notes may represent claims against the general assets of the debtor, or they may in some cases be secured by certain specific property. A druggist may buy a soda fountain, giving in exchange a series of promissory notes secured by a chattel mortgage on the fountain. If he fails to pay, the holder of the note may foreclose and repossess the fountain, or he may elect to sue as a general creditor.

Safeguarding Passage of Title.—The way in which a transaction is consummated plays a considerable part in determining the degree and duration of credit risk assumed by the seller. Thus it is essential for sales and credit executives to have a fundamental understanding of the laws governing sales. Competent legal counsel should always be consulted in framing general policies and in making decisions of major consequence, but the sales manager or credit man cannot always have a

lawyer at his elbow. The most important piece of legislation affecting marketing transactions is the Uniform Sales Act. This, on Jan. 1, 1933, was in effect in 32 states and 1 territory, which altogether produce approximately 80 per cent of all manufactured goods in the United States. Where sales are made in jurisdictions where this act is not in effect, it is wise to secure legal advice on the proper method of handling transactions. The general tendency in such states is to apply the rules laid down by the uniform code as far as local laws permit.

When Does Title Pass?¹—The time of passage of title from seller to buyer is of great importance in determining the credit risk borne by the seller. The closer this can be brought to the time of payment, when dealing with doubtful credit risks, the greater is the degree of safety. Most industrial marketing transactions involve a contract to sell specific goods at a definite price. Under some conditions this agreement may be held to consummate a sale, with passage of title. More usually, the actual transfer of title takes place at a later date. If title has not passed, the seller may, if he deems it advisable, refrain from making delivery. He may be sued for breach of contract but his loss in this case is often much less than if he had delivered the goods and the buyer subsequently had been unable to pay for them. Some contracts of sale specify (either explicitly or by inference) when title shall pass. The courts in such cases will uphold the intention of the parties to the contract. More frequently there is little evidence of intention, and in such cases the courts follow certain definite rules of presumption, outlined below.

The time of passage of title is also of considerable importance to the seller who desires to insure his goods against loss or physical destruction. He must be sure that his insurance contracts clearly cover all types of risk to which the goods are subject while they are legally in his possession.

Specific Goods in a Deliverable State.—“Where there is an unconditional contract to sell specific goods, in a deliverable state, the property in the goods passes to the buyer when the contract is made, and it is immaterial whether time of payment, or date of delivery, or both, be postponed.” Thus if a seller

¹ The material in this section is based largely upon a chapter by A. A. Schaefer in a manuscript entitled *Elements of Business Management*, privately printed for use by students at the Massachusetts Institute of Technology.

undertakes to deliver a specific lot of 1,000 bales of cotton, definitely identified, which he has in his warehouse, title would pass on the making of the contract. Goods which are to be manufactured or purchased subsequent to the contract are not "specific goods," nor are goods not precisely identified. If crating or packing is required, goods are held not to be "in a deliverable state."

Specific Goods Not in a Deliverable State.—"Where there is a contract to sell specific goods and the seller is bound to do something to the goods for the purpose of putting them into a deliverable state, the property does not pass until such thing be done." When the only thing required to make goods ready for delivery is to weigh, measure, or count them, American courts will usually, although not always, hold that title passes with the conclusion of the agreement. Where crating, or adjusting, or repairing is involved, title does not pass until such work is done.

Sale on Approval.—"When goods are delivered to the buyer 'on sale or return,' or on other terms indicating an intention to make a present sale, but to give the buyer an option to return the goods instead of paying the price, the property passes to the buyer on delivery, but he revests the property in the seller by returning or tendering the goods within the time fixed in the contract, or, if no time has been fixed, within a reasonable time.

"When goods are delivered to the buyer on approval, or on trial, or on satisfaction, or other similar terms, the property therein passes to the buyer

- a. When he signifies his approval or acceptance to the seller or does any other act adopting the transaction.
- b. If he does not signify his approval or acceptance to the seller, but retains the goods without giving notice of rejection, then if a time has been fixed for the return of the goods, on the expiration of such time, and, if no time has been fixed, on the expiration of a reasonable time. What is a reasonable time is a question of fact."

Sales of Future Goods.—"Where there is a contract to sell unascertained or future goods by description, and goods of that description and in a deliverable state are unconditionally appropriated to the contract, either by the seller with the assent of the buyer, or by the buyer with the assent of the seller, the property in the goods thereupon passes to the buyer. Such assent may be expressed or implied, and may be given either before or after the appropriation is made."

"Where, in pursuance of a contract to sell, the seller delivers the goods to the buyer, or to a carrier or other bailee (whether named by the buyer or not) for the purpose of transmission to or holding for the buyer, he is presumed to have unconditionally appropriated the goods to the contract, except where he has reserved the right of possession until certain conditions are fulfilled. This presumption is applicable, although by the terms of the contract, the buyer is to pay the price before receiving delivery of the goods, and the goods are marked with the words 'collect on delivery' or their equivalent."

Thus, in the absence of an agreement to the contrary, when a manufacturer accepts an order for merchandise and delivers the correct merchandise to a railroad for shipment to the buyer, title passes, and the seller becomes thereafter merely a general creditor of the buyer.

Sales Requiring Delivery or Prepayment of Transportation Charges.—"If the contract to sell requires the seller to deliver the goods to the buyer, or at a particular place, or to pay the freight or cost of transportation to the buyer, or to a particular place, the property does not pass until the goods have been delivered to the buyer or reached the place agreed upon."

Seller's Rights with Respect to Third Parties.—These presumptive rules indicate the desirability, when dealing with customers of doubtful credit, of specifying definitely when title shall pass. This affords a considerable measure of protection as long as the goods do not go out of the possession of the original seller or buyer. When dealing with distributors, however, a sale to a third party destroys the original seller's title. For instance, if a manufacturer delivers a machine to a dealer, retaining title by agreement, and if the dealer subsequently sells and delivers the machine to a customer, the customer's title is good. If the dealer does not pay the manufacturer, the latter becomes merely a general creditor.

Right of Stoppage in Transit.—The seller who has delivered goods to a common carrier for delivery to the buyer, and learns that the buyer has become insolvent, may stop the goods in transit by notifying the carrier. He thus obtains a lien upon the goods for the amount of the agreed price. He may resell the goods, using reasonable care and judgment, and satisfy his claim out of the proceeds, or he may rescind the sale and resume title to the goods. If he resells the goods he may keep any excess

over the agreed price or hold the buyer responsible for any deficiency. There is one important qualification to this right of stoppage in transit. If a negotiable bill of lading covering the shipment has been sold or pledged to a third party in good faith, that party's interest in the goods takes precedence over the original seller's lien. In trades where there are many weakly financed buyers and failures are common, close cooperation between the traffic and credit departments can effect considerable savings through exercise of this right of stoppage in transit.

Securing Credit Information.—Proper decisions on credit problems can be made only in the light of certain definite information. The credit man is guided by "the three C's," Character, Capacity, and Capital. He needs information first as to the fundamental honesty of the owners and managers of the customer's business. Then he needs to know whether the applicant has the ability to run his business on a profitable basis. Third, since businesses do fail in spite of the honesty and ability of their managers, he needs to know what are the reserves upon which he must depend for collection if profits fail or the business is liquidated. Such information is secured from a number of sources.

Mercantile Agencies.—The primary source of credit information is the general mercantile agency, a business which is practically dominated by Dun and Bradstreet. This agency periodically issues rating books covering geographic regions and trades. An effort is made to list and give a credit rating for every manufacturer and merchant. The credit rating reflects two elements, net worth and general credit standing. These ratings are indispensable to the man in charge of credit granting. They are usually sufficient except for the doubtful cases. Here their chief weakness is the fact that ratings may change subsequent to the issue of a book. In cases of doubt, special reports may be purchased for a small fee. These reports give full data on financial condition, experience of other creditors, antecedents of the firm, its owners and managers, and fire records.

In addition to the general mercantile agency, there are various special agencies which confine their activities to specific trades. Typical of these is the Shoe and Leather Mercantile Agency, Inc., with headquarters in Boston, which issues credit reports on tanners, leather jobbers, shoe and leather-goods manufacturers and wholesalers.

Exchange of Credit Experience.—One of the most common methods of judging the quality of a credit risk is to inquire the experience of other firms which have extended credit to the applicant. Most manufacturers are willing to exchange ledger information. Sometimes such exchanges are carried on directly, but much more frequently through credit clearinghouses, which may be maintained by individuals for profit or by trade associations for mutual benefit. There are certain obvious disadvantages to a direct interchange of ledger experience among competitors. In a clearinghouse, the interchange of information can be handled without disclosing the identity of individual creditors. Inherent in direct interchange, too, is the waste of time and money involved in handling a multiplicity of inquiries.

Reports on ledger experience usually include the following facts:

1. Date when account was opened.
2. Date of most recent sale.
3. Terms on which account is sold.
4. Highest amount of credit extended.
5. Amount now outstanding.
6. Amount past due, if any.
7. General habits of payment.

By analyzing the reports from other houses which have had dealings with the applicant, the credit man can readily determine whether or not he desires to take the account and how much credit he is probably safe in extending.

Salesmen's Reports.—In many lines of business, particularly where there are many unrated firms or where financial conditions of customers are subject to rapid change, salesmen are asked to gather information on the credit standing of present and prospective customers. With initial orders from new accounts salesmen are sometimes asked to secure signed financial statements. When dealing with small jobbers or manufacturers, salesmen may often be asked to submit reports periodically on the general condition of the customer's establishment, his inventory, and local opinion of his soundness. As a general rule it is undesirable to ask salesmen to secure credit information when satisfactory data can be secured in another way. Their primary duty is to sell, and they often resent and perform in a perfunctory manner assignments which consume time but have no direct effect on their sales volume.

Financial Statements.—The alert credit man invariably seeks to secure up-to-date financial statements covering the businesses of present customers and applicants for credit. Such statements are usually provided in the special reports furnished by mercantile agencies. Where such a statement is not reported, or where it appears dubious, an applicant for credit may be asked to submit a signed financial statement or balance sheet. This is also frequently required of customers who request extension of time on amounts due or increases in their credit limits. By analysis of these statements, usually involving the comparison of significant ratios, the credit man can estimate the likelihood of a debtor's being able to discharge his debt when it falls due. Requiring a signed financial statement is decidedly beneficial in weeding out fraudulent applications for credit. Many states have laws making it a penal offense to submit a false statement for the purpose of obtaining credit.

Collection of Accounts.—One of the places where cooperation between sales and credit departments is most urgently needed is in the collection of overdue accounts. It must not be forgotten that every debtor is a customer. To secure immediate payment of past obligations at the expense of future business is seldom profitable. On the other hand, to wait until every customer gets ready to pay his bill is merely placing a premium on incompetence and dishonesty. In fact, a lax collection policy may even result in loss of customers, for debtors whose accounts are past due are often likely to place new orders with competitors.

Cases Pending Adjustment.—In industrial marketing a great many collection difficulties arise because of some misunderstanding or dispute between buyer and seller. The supplier of material bills the buyer for a few hundred pounds more than the latter admits receiving. Perhaps the buyer rejects part of a shipment on the ground of quality defects, retaining the balance, and claims an adjustment. A shipment is routed contrary to the customer's instructions. He accepts it but demands the right to deduct the amount of extra transportation charges. A few buyers will discount such disputed accounts in full, but more usually payment is withheld until a satisfactory settlement is reached, or the buyer offers payment of what he considers properly due. Strained relations between the sales and credit departments usually result from the latter's attempt to collect such disputed accounts. It is generally sound practice to let

the sales department adjust these cases and to withhold any attempt to collect until the matter in dispute has been settled. It is true that a large part of the responsibility for confusion often lies with customers who fail to report shortages or defects promptly. Except for this, adjustments can usually be effected long before the expiration of the credit period. The sales department should always advise the credit department where adjustment negotiations are in progress. The first collection approach should always be to learn whether the customer disputes any of the items covered by the invoice which has become past due. If these precautions are undertaken, there is little need for friction between the sales force and the credit department.

Unearned Discounts.—Many concerns selling to the industrial market face a difficult problem due to the practice of some customers of taking discounts which the credit department regards as unearned. In some cases this may be the result of misunderstanding. A customer may protest a bill and feel that he is entitled to the cash discount if he pays within 10 days of the date when a compromise is reached. A shipment may be delayed in transit, and the buyer after taking sufficient time to check the goods may discount the bill several days after the discount period has expired. Some customers persistently take cash discounts although their payments are made 12, 15 or 20 days after the date of invoice, owing to the slowness of their own accounting departments. In other instances, the practice is merely a form of "chiseling." The credit manager often finds this a perplexing problem. It costs more than the amount involved to collect the few cents or dollars of unearned discount taken on the average invoice. To ignore the practice and permit it to go unchecked avoids the danger of antagonizing customers. Yet laxity penalizes the conscientious customer by awarding an indirect price reduction to his less scrupulous competitor. In the long run it is probably to the seller's advantage to maintain the integrity of his cash-discount policy. At times, particularly when every bit of business is urgently needed, it is a hard course to follow.

Increasing the Security.—Cases often arise where a customer is unable to meet an obligation on the due date, but is in perfectly sound condition except for his lack of cash. Prompt and courteous investigation and extension of time in such cases often wins

permanent good will for a seller. In other instances, the customer's future may be dubious. Here it is usually regarded as good practice for the credit department, perhaps acting through the salesman, to endeavor to get additional security either for amounts past due or for additional credit which is extended. An open account may be converted into a promissory note. If some officer of a debtor corporation has private means, he may be asked to endorse the note. Here again tactful handling may often not only improve a creditor's chances of ultimate collection, but preserve a customer. The use of the local sales representative for such negotiations has much to commend it. He is personally acquainted with the situation and the people involved, knows how they can best be convinced, and is above all anxious to save a customer.

When a Debtor Becomes Insolvent.—Even when a debtor has actually become insolvent, he is not necessarily lost as a customer. To be sure, further extension of credit to a customer who cannot meet his obligations is distinctly dangerous. Other creditors are always involved, and there is danger that any one of them may force him into bankruptcy. If the debtor has only a few large creditors, it is usually possible to bring them together into an agreement to refrain from pressing for collection, to extend additional credit, or perhaps even to scale down the existing indebtedness. Some years ago a paper mill which was an important customer of several suppliers got into financial difficulties. A creditors' committee was formed, with a representative from each creditor. The owners of the mill made an assignment, or voluntary transfer in trust, of the business to this committee. The group employed a manager, and each member extended further credit for supplies. The business was operated for about two years, by which time all the creditors had been paid off in full. The mill was then transferred back to the owners as a going concern, capable of earning a reasonable profit.

Adjustment Bureaus.—Such arrangements are difficult to effect when there are many small creditors involved. They may in some cases be facilitated by the use of adjustment bureaus, which have been formed in some trades and in almost all important industrial localities. The National Association of Credit Men has been instrumental in setting up bureaus of this sort. Most of their activity is in liquidating insolvent concerns without

recourse to the time-consuming and expensive procedures of legal bankruptcy. They do, however, afford a useful medium for bringing creditors together and for arranging extensions and compositions when it seems feasible to keep the debtor in business.

Amendments to the Federal Bankruptcy Act.—The 1934 amendments to the Bankruptcy Act should operate to make it easier for insolvent corporations to be continued in existence, by preventing a minority of creditors from pressing their claims to the detriment of others who are interested in preserving important customers. By this act, Federal courts are now given "original jurisdiction in proceedings for the relief of debtors" by the process of corporate reorganization. Either the debtor concern or any creditor who is in a position to institute bankruptcy proceedings may file in a federal court a petition seeking reorganization. Upon the filing of such a petition the court immediately acquires exclusive jurisdiction over the debtor concern, with all the powers of a receiver in equity. It may enjoin all suits, bring together the various classes of creditors, and help to work out a settlement. The final plan of reorganization must be approved by the court and must have the assent of two-thirds of each class of creditors and a majority of each class of stockholders affected.

Credit Insurance.—It is possible for manufacturers and wholesale distributors in most lines of business to secure insurance covering the risk of uncollectible accounts in excess of the normal ratio for the particular business of the insured. Certain insurance companies specialize in this field. They have developed "mortality tables" on the basis of which rates are set. To qualify for this form of coverage, the insured must limit his extension of credit to firms of specified ratings, and the amount of credit to any one account to a maximum for each grade of rating. If a debtor becomes insolvent, the insurance company indemnifies the policy holder. The latter, however, is required to be a co-insurer, so that he does not receive the full amount of his loss.

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CHAPTER XVII

MARKETING TO INDUSTRY ABROAD

Export Markets for Industrial Goods.--Although export trade as a whole is far from an important factor today, it remains true that a substantial number of concerns serving the industrial market sell some proportion of the goods they produce to customers outside the United States. Some have taken their export trade seriously, and have sunk considerable time and money into the development of foreign markets. To others, export sales have been merely "velvet," to be sought whenever available without the establishment of a definite organization for the purpose. The producer who seeks export markets today finds himself confronted with serious problems. Opportunities are circumscribed by the rising walls of nationalism. It is becoming increasingly difficult to hurdle tariff barriers. Embargoes and quotas may force the exporting manufacturer out of markets which he has been at great pains and expense to develop. Where he can make sales, he not infrequently finds that he cannot collect the amounts due him because of exchange restrictions. Although his customer may be willing and able to pay in marks or pesos, the creditor must speculate as to whether and when he can convert these currencies into dollars, and how many dollars he will ultimately receive. Despite these handicaps, a considerable number of manufacturers, particularly of industrial machinery and factory and office equipment, are achieving a fair measure of success in developing foreign markets. Their efforts were materially helped by the devaluation of the American dollar in 1933, which made it possible for them to compete effectively in many markets (see Fig. 45).

Need for a Definite Export Policy.--Certainly every manufacturer who is engaged in doing business abroad, or who contemplates it in the future, ought to formulate a definite policy on export trade. If he is to seek foreign sales, let it be done in a wholehearted and efficient manner, with full realization of the difficulties involved and ample provision for coping with them

in an intelligent fashion. Foreign trade is not child's play. It cannot be undertaken as a mere offshoot of domestic sales work. Conditions in foreign markets are different. The problems of export selling require men specially trained to cope with them. Men cannot be trained nor distribution arrangements perfected

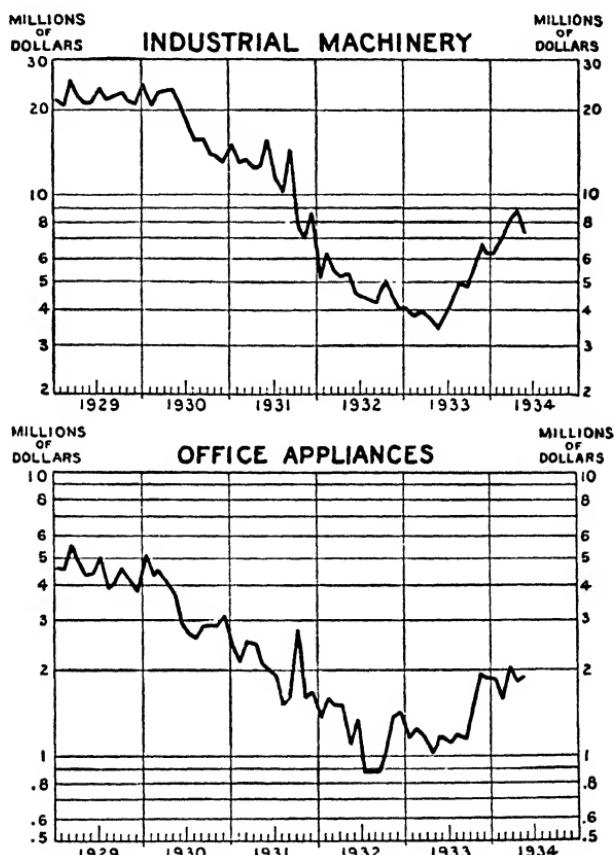


FIG. 45. --The effect of the depression upon exports of two major lines of industrial goods. The rising curve in 1933-1934 shows the effect of dollar devaluation in stimulating export sales. (From *Commerce Reports*, July 28, 1934.)

in a few short months. The concern which considers seeking markets abroad should ponder what these markets may ultimately mean to it in terms of profit, and whether the risks justify the cost. It is important, also, to come to a clear decision as to what is expected from the export venture. Is it primarily to dispose of an added volume which will swell profits by cutting

overhead, although the foreign sales themselves produce no direct profit? Or is a direct profit the objective? This decision will have much influence on the course to be followed.

ANALYSIS OF EXPORT MARKETS

To a far greater degree than in domestic marketing, the collection and interpretation of statistical data on foreign markets requires the services of a competent economist. The purchasing power of a foreign nation depends upon its balance of trade. This in turn may be largely a matter of world prices for the major commodities which it exports. The present lack of adequate mechanisms for clearing international balances may divert purchases from a country where exchange is difficult to secure to one where it is easily obtainable. The situation is constantly changing as a result of changes in price levels, economic conditions, and special international agreements.

Statistical Data.—Statistical information on foreign markets is as a rule decidedly less complete and less available than for markets in the United States. In the nations more advanced industrially, the available figures are usually accurate. In other instances, data are often inaccurate or collected and presented in such a way as to be of little use. Concerning data of basic importance in industrial marketing, a report issued by the League of Nations states that

Very few countries publish comprehensive information concerning the output of industry, and it is impossible from the evidence available to obtain any accurate conception of the changes which have taken place in world industrial capacity or productivity.¹

Bureau of Foreign and Domestic Commerce.—The chief reliance of the American exporter for factual information is the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce. This bureau maintains offices in most important industrial centers. Reorganized in 1921 under the guidance of Herbert Hoover, then Secretary of Commerce, it established branches and maintained representatives in practically all foreign countries. Its activities were expanded throughout the decade 1920-1930 until it was in a position to render service to exporters. Not only were economic and trade studies made of industries and countries, but lists of potential

¹ *Memorandum on Production and Trade*, League of Nations, Geneva, 1930.

customers and agents for specific lines of goods were furnished to interested manufacturers. The foreign representatives of this bureau were in fact practically trade-promotion men at the service of any American manufacturer who desired to use them. Indirectly these services represented a subsidy to export trade.

The foreign trade activities of the Bureau of Foreign and Domestic Commerce were curtailed when the Roosevelt administration came into power in 1933. Many foreign offices were closed and the personnel was drastically reduced, both abroad and in the domestic offices. As far as reports on general conditions in important foreign markets are concerned, the service rendered by the bureau remains the most valuable single aid for the average exporting manufacturer. It furnishes general information relative to business conditions in a specific foreign market, the competitive situation with respect to products of other countries consumed in the market in question, information concerning import duties and import restrictions, sales methods and credit terms, the foreign exchange situation, and other current features of a particular market. The following classes of service, formerly rendered in some cases, have been discontinued:

1. Special market surveys for individual firms involving the compilation of data which are not readily available.
2. Negotiations and transactions in behalf of an individual firm, such as:
 - a. Actual sale of merchandise.
 - b. Conclusion of an agency agreement.
 - c. Collection of an account.
3. Settlement of a trade dispute (except where the public interest is clearly involved).
4. Correspondence or personal interviews in behalf of a firm that is negotiating with a foreign buyer.

Organization of Bureau Services.—The Bureau of Foreign and Domestic Commerce (as of July, 1933) maintains offices under the direction of commercial attaches or trade commissioners in 32 countries, as follows:

Athens, Greece.
Batavia, Java.
Berlin, Germany.
Bogota, Colombia.
Brussels, Belgium.
Buenos Aires, Argentina.
Cairo, Egypt.
Calcutta, India.

Copenhagen, Denmark.
Havana, Cuba.
Istanbul, Turkey.
Johannesburg, South Africa.
Lima, Peru.
London, England.
Madrid, Spain.
Manila, P. I.

Mexico City, Mexico.	Shanghai, China.
Ottawa, Canada.	Singapore, Straits Settlements.
Panama, Panama.	Stockholm, Sweden.
Paris, France.	Sydney, Australia.
Prague, Czechoslovakia.	The Hague, Netherlands.
Rio de Janeiro, Brazil.	Tokyo, Japan.
Rome, Italy.	Vienna, Austria.
Santiago, Chile.	Warsaw, Poland.

In these areas and in other trade centers the consular service, under the State Department, assists in the collecting and reporting of trade information. The consular service in particular undertakes to handle inquiries on the subject of protection and promotion of American foreign commerce, while the bureau representatives are primarily responsible for general economic and trade reporting.

Service to domestic manufacturers is handled through district offices of the Bureau of Foreign and Domestic Commerce, which are located in major industrial centers. Cooperative offices are maintained in many smaller centers under the jurisdiction of local chambers of commerce and trade groups. These are staffed by the local organizations, and maintain more or less complete files of bureau material.

Specific Services of the Bureau.—The Bureau of Foreign and Domestic Commerce publishes a great number of bulletins on world trade in various commodities and on the technical details of doing business in specific foreign markets. Typical bulletins are entitled: *World Chemical Developments in 1933 and Early 1934*, *International Trade in Machinery Belting*—1932; *Trading Under the Laws of Germany*—1933; and *Channels of Distribution of American Merchandise in India*. Besides these bulletins, a weekly periodical, *Commerce Reports*, is published, which gives current news on foreign trade conditions. Special mimeographed circulars are issued covering changes in duties and import restrictions of foreign nations.

Trade Lists.—The bureau also compiles trade lists available to American manufacturers and exporters. These lists contain the names and addresses of individuals or firms engaged in particular lines of trade in foreign countries. They are continually checked and revised by the Commercial Intelligence Division of the bureau.

Trade Opportunity Reports.—The domestic offices of the bureau clear reports from consular offices or commercial attachés on

foreign buyers who are seeking sources of supply or agency arrangements. To insure that these trade-opportunity reports are significant, the reporting officer in the field is required to certify that each inquiry meets the following tests:

1. That a market actually exists or is possible of development for the item or items called for.
2. That the placing of an additional buyer or distributor in the market will increase the sale of American goods rather than add another distributor in a market believed to be well served and thus divide existing business.
3. That the prospective buyer is qualified to distribute successfully, is using the trade opportunity legitimately, and is not endeavoring to obtain prices and terms from American suppliers for illegitimate uses, or blue prints, catalogues, etc., for illegitimate uses.
4. That no trade obstacles exist to a degree serious enough to preclude business, such as import restrictions, import quotas, high tariffs, exchange controls, nationalistic tendencies, local manufacturing, competitive prices, and other co-related items.

These trade opportunity reports are available to interested American firms or individuals upon request.

World Trade Directory Reports.—No credit reports are furnished by the bureau nor does it assume responsibility for the standing of foreign firms named in its lists. It will provide reports on foreign business firms based upon trade-directory information and covering such items as bank references and capitalization. These reports, like most of the other publications of the bureau, are subject to a fee. This requirement was laid down by the Economy Act of 1933.

Miscellaneous Services.—District offices of the bureau are visited from time to time by trade commissioners or commercial attachés from foreign centers. Exporting manufacturers are notified of such visits and given opportunity for personal contact with these men. Notices of visits of foreign business men and their American addresses are also furnished. In addition, the district offices act as clearinghouses for handling inquiries, sometimes answering them from their own files, in other cases forwarding them to Washington for transmission to foreign representatives.

Other Sources of Market Data.—Banks which maintain foreign trade departments can usually furnish considerable information gathered through their correspondents or foreign branches. Chambers of commerce in some cities and the

United States Chamber of Commerce can often help. Several local chambers have organized foreign trade departments, which maintain data on tariffs, exchange restrictions, shipping facilities, methods of packing, and legal requirements. Some American advertising agencies maintain branches in foreign centers and can conduct efficient marketing research there for their clients. Certain foreign agencies are also organized to carry on such work.

Field Surveys.—Some prospective exporters send representatives abroad to conduct surveys of foreign markets. This procedure is frequently ineffective because of lack of the right man. It goes without saying that the investigator can hope for little success unless he knows the language and the characteristics of the people. The difficulty of securing men who know both the prospective exporter's business and the market is one reason why so many ill-advised ventures into foreign trade are undertaken. If a properly equipped investigator is not available, it is usually much wiser to rely on advice from banking connections and commercial attachés.

DISTRIBUTION ARRANGEMENTS

The manufacturer who would seek foreign trade can do so in several ways. In certain lines of business he may join with some of his competitors to form an export association operating under the Webb-Pomerene Act. If he would avoid as far as possible the problems of foreign trade, for a price, he may employ the services of an export commission house. If he seeks a greater degree of control, he may arrange with local firms in foreign countries to take over the distribution of his product on much the same basis as manufacturers' agents in the United States. Or he may, if his business or prospects warrant, undertake to open foreign branch offices and maintain his own representatives abroad. Without any of these steps, he may, of course, be able to secure a certain amount of foreign business through buyers who visit the United States, or resident offices such as the Amtorg Trading Corporation.

Export Houses.—Export commission houses are middlemen who specialize in foreign trade. They may specialize by lines or they may do a general business in both industrial and consumer goods with a single country or group of countries. One such house may, for instance, undertake to sell gold-mining

machinery in any part of the world; another may confine its activities to, say, Cuba, and represent manufacturers of such diverse lines as sugar-mill machinery, typewriters, and household refrigerators. Ordinarily commission houses were organized to act as buyers' agents in purchasing. Orders received from buyers abroad were placed with American manufacturers on a competitive basis. The tendency has been for these organizations to become in fact manufacturers' agents, undertaking to sell a single producer's goods. The services performed by such houses compare roughly with those rendered by jobbers in domestic markets. Ordinarily they are not well adapted to pushing sales aggressively, particularly with new products. They are of substantial value in handling the details of routing shipments and financing transactions.

Use of Agents Abroad.—The manufacturer who regards his export markets as a steady source of business over the long pull generally either enters into arrangements with agents in the countries which he desires to cover or undertakes to set up his own branch organizations. The problem here is essentially similar to the problem of using distributors or selling direct in the domestic market. The availability of suitable agents, the amount of business expected set up against the cost of maintaining a foreign branch, the availability of qualified direct representatives, are all factors in the decision. When foreign agents are used, each is generally given exclusive rights in a certain territory. Because foreign trading areas are often not clearly defined, and one suspects because of limited geographical knowledge in many American sales organizations, exclusive territories are often awarded far beyond agents' ability to cover them effectively. Once a market is selected for attention, suggestions as to suitable agents can often be secured through banking connections, representatives of the Commerce and State departments, or chambers of commerce. In some cases trade directories give fairly complete listings of dealers in various lines. Names from such lists can be qualified, and preliminary negotiations carried on by correspondence. Final arrangements can best be made by personal visit. Care must be taken to ascertain that the agent is qualified to handle the line in question and to cover the territory which it is proposed to grant him. In this connection it is well to remember that customary methods of distribution often differ from one country to another.

Well-known American manufacturers are often approached by foreign agents who desire to distribute their products abroad. Haphazard acceptance of such proposals is no more successful than would be a similar policy in the domestic market. First it is necessary to decide whether the foreign market is worth seeking, then whether it is best handled through agents, what type of agent can best handle the particular market, and finally, whether the applicant is qualified to do the job.

Direct Representatives.—The principal problem in selling abroad through direct factory representatives is that of finding suitable men and keeping them on the job. Preference seems to be for men who have been for some years in the company's employ and who have demonstrated their loyalty and perseverance. When outside specialists are hired, it is of course essential that they be made thoroughly familiar with the company, its products, and its sales policies. This usually involves several months in plants and sales offices. Just as in selecting a salesman for a domestic territory, the man sent into a foreign country should be suited by background and temperament to get on well with the people with whom he must do business. The "go-getter" is often less successful abroad than at home. Definite arrangements as to compensation, expenses, authority, and responsibility should be made in advance, and preferably reduced to writing. Some companies prefer to negotiate formal contracts. Since the foreign representative operates under conditions which preclude any close direction of his activities, he must be a man of stability and must enjoy the confidence of the home office. Unless he has practically complete authority, he can usually neither win the respect of his customers nor secure any considerable amount of business.

Export Associations.—In several lines of trade, manufacturers who desire closer contact with their foreign markets than that afforded by dealing through export houses, yet who hesitate to organize their own systems of foreign branches, have organized cooperative export associations under the Webb-Pomerene Law. This law, in effect, exempts organizations of manufacturers for the sole purpose of conducting export trade from the provisions of the antitrust laws. Webb Law associations are made up of manufacturers of competitive or supplementary lines of goods. They maintain foreign sales offices and deal directly with foreign users or dealers. They may fix prices, allot markets to their

various members, and set up quotas of goods for export. For basic commodities they seem to work well. With branded articles or highly specialized goods, there sometimes arise disputes among the members, each of whom is likely to feel that his own line is not receiving a fair share of attention.

Servicing Goods Sold Abroad.—The sale abroad of machinery and specialized equipment which requires servicing presents a difficult problem. Failure to provide proper service prevents the proper development of export markets and is likely to leave a bad impression which cannot be overcome later. On the other hand, the volume of sales in foreign countries in many cases does not warrant the establishment of a factory service organization. Where this is true, agents or distributors must be relied upon to provide engineering service. Particularly in Europe, competently trained technical men are readily available. To be sure, they are as a rule not inclined to dirty their hands delving into machinery troubles as are American service men. Dealer's service representatives need training in the construction, adjustment, and use of the specific equipment they are to service. This can best be handled by bringing the dealer's man to the factory and keeping him there long enough to gain thorough familiarity with the manufacture and maintenance of the equipment. It may then be advisable to send him into the field with a regular service man to observe the sort of difficulties which may be expected to arise. One authority emphasizes the desirability of this training in teaching the proper attitudes toward people in customers' organizations. Further training may be given by sending an American service man periodically to spend some time with the native service representatives.

Where there is a considerable volume of business, the manufacturer may well decide that the best solution is to maintain a permanent service representative abroad. For specific large contracts, engineers and mechanics may be sent from the factory to supervise the work of installation and to train native operators. The only special problem which arises in such cases is the selection of the proper men for foreign work.

FINANCING EXPORT SALES

The distances involved, the time consumed in making shipments abroad, and the need for conversion from one currency to another require different methods from the simple open account

common in domestic transactions. Methods of handling the financing of export sales vary according to commodities and from one group of nations to another. In most transactions, the seller draws a bill of exchange against the buyer. To this he attaches the necessary copies of bills of lading, invoices, insurance certificates, consular visas, etc. He delivers the papers to his bank which may or may not discount the draft. If this bank does not engage in foreign transactions, it sends the papers to its correspondent bank, usually in New York. The foreign department of the New York bank checks the documents and sends them on to one of its foreign branches or to a correspondent at the destination of the goods. The foreign bank presents the draft to the importer, who pays it or accepts it, according to the arrangements made, and thus is entitled to the shipping documents which give him possession of the goods.

Letters of Credit.—Where it is desired to reduce risk to a minimum, the foreign customer may be required to present a letter of credit. This is a notification by the customer's bank abroad that it will accept bills of exchange drawn by the seller on the buyer up to a specific amount and subject to conditions specifically set forth in the letter of credit. The foreign bank instructs its correspondent bank in the exporter's city to issue a letter of credit and the latter notifies the exporter. The latter takes his documented drafts to the bank and receives the proceeds, less interest. Letters of credit may be revocable or irrevocable.

Acceptances.—Bankers' acceptances are frequently used in connection with export transactions. Under the Federal Reserve Act, banks may accept bills of exchange arising out of foreign or domestic trade up to 50 per cent of their combined capital and surplus. Such bills may be drawn for any period up to 90 days sight. The amount which a bank may accept for the account of one firm or individual is limited to 10 per cent of its capital and surplus, except where the bank is secured by shipping documents or other form of security. These acceptances are rediscountable at the Federal Reserve Bank. In practice, the exporter arranges in advance with his bank for an acceptance credit. The bank agrees that, when the exporter has drawn upon a foreign consignee for a certain limited amount, he may draw another draft upon the bank, which it will accept. The exporter may then immediately discount the

accepted draft. The bank is repaid from the proceeds when the foreign customer settles the account. In connection with the acceptance credit, the exporter signs an acceptance agreement which gives the bank a lien upon the goods or the proceeds from their sale.

Installment Financing.—Industrial equipment is often sold abroad on the installment plan, although this arrangement is less common than in the United States. Certain domestic finance companies have extended their operations to foreign markets, and are prepared to underwrite such credits. The problem is made somewhat more difficult by the variety of legal regulations of foreign governments.

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CHAPTER XVIII

INDUSTRIAL MARKETING UNDER THE NEW DEAL

Economic Implications.—The things which have happened in and to the business structure of the United States since Mar. 4, 1933, are inevitably of profound importance to everyone engaged in marketing to industry. What measures will become permanent, and what are only temporary stop-gaps, must remain for the future to decide. Evaluation of current happenings is always a difficult undertaking. Yet it is a fairly safe assumption that for many years to come governmental policies and actions will play a tremendously important part in determining whether particular industries shall grow or languish. Grant to the economic fundamentalists the fact that economic law cannot be abrogated by congressional legislation nor economic forces impounded by Presidential action, we must face the fact that for considerable periods the direction and extent of business activity can be regulated by governmental fiat. Engineers control the courses of mighty rivers, not by power to set aside the laws of hydraulics, but by their ability to understand and harness the forces involved. Many intelligent men believe that economic tides can and must be subjected to a similar sort of engineering control. For many years there has been a gradually growing acceptance of this idea. The New Deal with its moves in the direction of a planned economy represents the first outright attempt in the United States to engineer a coordinated economic structure. One may question the competence of any particular set of engineers, or indeed doubt whether men of sufficiently broad understanding and vision to do the job well are available. The individual business man, however, must endeavor to do the best he can with conditions as he finds them. What, then, is this New Deal likely to mean to those engaged in industrial marketing?

Low Visibility.—To try to consider the effect of governmental policies when those policies are themselves in a state of flux is a thankless task. As this is written (August, 1934), certain

phases of governmental activity seem to promise rather fundamental changes in the nature of business. Most important of these are the movement to effect a "redistribution of the national income," the various moves toward centralized control of credit, the avowed intention to encourage decentralization of industry, the prospect of tremendously high governmental expenditures for public works, and the organization of industries into more or less self-governing groups.

Redistribution of Wealth.—One theory which has been much publicized and has won a wide degree of acceptance ascribes the depression which began in 1929 to overinvestment in productive capacity. Too much of the national income, according to this theory, has gone to those who invested in securities; too little to those who use their earnings to buy goods for consumption. Hence, it is said, we have a condition of excessive productive capacity with a simultaneous scarcity of buying power in the hands of the masses of the population. There is much room for argument as to the economic soundness of this hypothesis but the fact remains that it is apparently playing a large part in the "planned economy" program. To look for its importance to diminish, whatever party may be in power, is to ignore the political validity of a promise to improve the relative economic condition of a majority of the populace. A clear objective is the diversion of a larger part of the national income to wage earners and farmers. Of particular importance to concerns engaged in industrial marketing have been the processing taxes levied on various agricultural commodities.

Processing Taxes.—The disparity between the prices received by farmers for the commodities produced by them and the prices of manufactured goods which they must buy has long been an acute economic and political problem. As a part of the New Deal, an attempt has been made to raise the prices of agricultural commodities by inducing farmers to restrict their production. Benefits have been paid to producers who signed curtailment agreements. To some extent submarginal land has been bought or leased and retired from cultivation. These activities have been financed by processing taxes. Cotton, for instance, has been subject to a 4.2 cents per pound tax. Cotton competes with many other commodities. Paper bags, burlap bags, and cotton bags compete for packing cement, sugar, flour, potatoes, and a number of other articles. Paper and cotton towels compete as

washroom supplies. Rayon potentially can displace cotton to a certain extent. Price is usually a determining factor in competition along these and many other fronts. It has been necessary, therefore, to levy compensatory taxes on competitive commodities so that the industries whose materials were subject to processing taxes should not differ. But the exact preservation of the status quo in this manner would call for superhuman intelligence. Competitive conditions have been influenced to some degree in many fields and a new variable has been introduced for sales managers to think about.

Credit Control.—Through the consolidation of the banking system, the formation of numerous banking agencies under direct government control, and the Securities Act of 1933, the executive branch of the Federal government is potentially able to exercise almost absolute control over the direction of industrial growth. The extent to which this power will be exercised is not yet apparent. There is no more potent way to effectuate a policy of economic planning. The existence of this power must be of particular interest to manufacturers of major industrial equipment. A large part of their sales, in the long run, are accounted for by expansion of old industries or development of new ones. Such ventures require financing with long-term credit. It must be recognized that many of our economic troubles can be laid to investment bankers who floated issues of new securities because they could be sold, not because they were economically justified. Machinery manufacturers and contractors benefited temporarily but were in many cases led into overexpansion which proved disastrous. The existence of a centralized control over credit can prove valuable in stabilizing extreme fluctuations in these industries. Whether it will do so or not depends on the vision, intelligence, and courage with which it is administered. Industrial sellers, in planning their future courses, must watch it closely.

Decentralization of Industry.—It is the avowed intention of the Roosevelt administration to encourage a more even dispersion of population and industry over the entire country. This merely involves expediting what appears to be a definite trend, as evidenced by the industrial growth of the South and the Pacific Coast in the last few years. By its power policy and possibly by the policies of the Transportation Board, conditions may readily be created which will stimulate the establishment of

local industries or branch plants in many areas. If and as this develops over a period of years the industrial market will become less concentrated. Salesmen will have to cover wider areas; more branches will be needed to secure adequate sales coverage and to meet service requirements. Selling costs are likely to rise somewhat and the control problems of sales managers to become more difficult.

Public Works.—If the thesis that private industry cannot absorb the large number of people unemployed (estimated by the U. S. Chamber of Commerce at 7,000,000 in August, 1934) proves tenable, we shall probably see vast and continuing projects of public construction. The theory of using public projects as a balance wheel to stabilize secular and seasonal variations in business activity has much to commend it. In practice there has in the past been too little coordination of public works with private business activity. Faulty planning, the delays of governmental red tape, and local political pressure have resulted in poor timing. If a program of public works could be so administered as to stabilize consumer incomes, a worth-while degree of added stability would also be added to industrial markets.

Of more immediate practical importance to the industrial sales executive is the likelihood that in the future a larger proportion of his sales are likely to be made to governmentally controlled institutions. Competition for government business is not the same thing as competition for private business. The restrictions governing competitive bidding often work to the disadvantage of the producer who has a superior article which does not conform to specifications or which is more expensive. There is less assured stability of buyer-seller relations. While the sum total of graft and favoritism is probably no larger in governmental than in private purchasing, difficult and unpleasant problems are sometimes met. In any event, dependence on a greater proportion of sales to governmental bodies will in many cases require substantial changes in sales organization, personnel, and methods.

The National Industrial Recovery Act.—In their long-range implications, the previously mentioned aspects of the "New Deal" program are probably of much greater fundamental importance than is the much-discussed National Recovery Administration. The Recovery Act of 1933 was primarily

designed to spread the existing amount of employment over as large a number of people as possible. In this respect, it was an improvement over the "share-the-work" movement undertaken earlier in the depression, which failed because it depended entirely upon moral suasion. To enlist the cooperation of employers in taking on more workers and raising wage rates, industries were given the power to organize under codes and to do certain things which had been forbidden under the anti-trust laws. The President's message to Congress on May 17, 1933, clearly outlines the purposes for which the legislation was sought.

My first request is that (I) the Congress provide for the machinery necessary for a great cooperative movement throughout all industry in order to obtain wide re-employment, to shorten the work week, to pay a decent wage for the shorter week and *to prevent unfair competition and disastrous overproduction.*

Employers cannot do this singly or even in organized groups, because such action increases costs and thus permits cutthroat underselling by selfish competitors unwilling to join in such a public-spirited endeavor.

One of the great restrictions upon such cooperative efforts up to this time has been our anti-trust laws. They were properly designed as the means to cure the great evils of monopolistic price fixing. They should certainly be retained as a permanent assurance that the old evils of unfair competition shall never return. But the public interest will be served if, with the authority and under the guidance of government, private industries are permitted to make agreements and codes insuring fair competition. However, it is necessary, if we thus limit the operation of anti-trust laws to their original purpose, to provide a rigorous licensing power in order to meet rare cases of non-cooperation and abuse. Such a safeguard is indispensable.

Code-making Procedure.—The National Industrial Recovery Act was passed by Congress on June 13, 1933. Under the power of this statute, the National Recovery Administration was set up. Industries were invited to submit for approval codes of fair competition. Existing trade associations usually took the lead in developing codes. Representatives of companies engaged in a particular industry were invited to assemble, and in most cases chose a code committee from their numbers. This committee drafted a tentative code, submitted it to the members of its industry for approval, and then took it to Washington. Here the committee was referred to a deputy administrator, whose first step was to ascertain that the group sponsoring the

code was truly representative of its industry. A date was then set for a preliminary hearing. In the interim, copies of the proposed code were submitted for study to the Labor Advisory Board, the Industrial Advisory Board, the Consumers Advisory Board, and the legal division of the National Recovery Administration. Representatives of each of these subgroups attended the preliminary hearing to try to insure that the code should amply protect the various interests represented. The first hearing usually disclosed necessary alterations and a series of conferences would follow until finally a code more or less acceptable to all factors was evolved. Then a final hearing was held, final changes made, and the completed code, approved by the National Recovery Administrator, sent to the President for approval. In many cases certain conditions and interpretations were attached to the order of approval. Once approved, the codes had the force of law. Violations were made subject to specific penalties.

Code Provisions.—As a matter of statute, every code was obliged to carry provisions relating to hours of labor, wages, and working conditions. These provisions have in some cases had important effects on industrial markets. In the cotton textile code, for example, the minimum wage was set at \$12 per week for Southern mills and \$13 per week in Northern mills. Hours of labor were limited to a maximum of 40 per week and machine operation was limited to two 40-hour shifts weekly. Because the Northern mills had been operating closer to the conditions set down, their competitive position was on the whole decidedly improved and they became better markets for materials, equipment, and supplies. The increase in wage rates and the shortening of hours of labor also created a considerable demand for new equipment to replace obsolete machinery in North and South alike.

Price-control Provisions.—Extremely important in their effect upon marketing practice are the provisions, found in most codes, which seek to secure some measure of control over prices and those which regulate various trade practices. On the theory that starvation wages are largely the result of excessive and cutthroat competition, various schemes have been written into industrial codes and approved by the President which endeavor to outlaw the cutting of prices below a defined point. These price-control schemes fall into four more or less well-defined categories.

In a few cases the setting of definite minimum prices has been approved. More commonly, the minimum price has been related in some manner to cost. One frequently used device, the open-price agreement, sets no definite minimum, but seeks to control price cutting through giving publicity to all prices. Finally, control of prices has been sought through the principle of limitation of production.

Direct Price Fixing. —Of the various classes of industrial goods, direct price fixing has been approved only for basic materials, notably lumber and petroleum. It is obviously feasible to set minimum prices only for standardized goods or services produced under more or less uniform conditions. The price-control provisions of the lumber and timber products code read as follows:

Art. IX (a) Whenever and so long as the Authority determines that it will contribute toward accomplishment of the declared purposes of the Code, and whenever it is satisfied that it is able to determine cost of production as defined in this section (a), the Authority is authorized to establish and from time to time revise minimum prices f. o. b. mill, to protect the cost of production of items or classifications of lumber and timber products. Such minimum prices shall be established with due regard to the maintenance of free competition among species, Divisions and Subdivisions, and with the products of other industries and other countries, and to the encouragement of the use of said products; and except for export sales shall not be more than cost of production after deducting the capital charges specified in items 11 and 12 of this section (a).

[There follows a detailed description of the method by which current weighted average cost of production shall be determined.]

(d) In determining minimum prices for any Division or Subdivision the Authority shall establish equitable price differentials for products below accepted standards of quality, as prescribed by the Authority, such as the products of some small mills.

(e) No person shall sell or offer for sale lumber or timber products upon which minimum prices have been established at prices less than those so established. . . .

(f) No person shall sell or offer for sale non-standard grades, sizes, dimensions or classifications of lumber or timber products, for the purpose of evading the provisions of this article.

(j) Minimum prices established in accordance with the provisions of this Article shall become effective ten (10) days after publication thereof by the Authority.

It is apparent that sound administration of such provisions requires a high degree of intelligence and integrity on the part of the code authority. A highly developed system for collecting detailed statistical information and interpreting it rapidly is essential. As long as productive capacity outruns demand, the minimum prices fixed by the code authority will be the prices actually in effect. With price provisions of this sort it is a relatively simple matter to prove violations, and consequently enforcement should be easy. From the economic point of view, price fixing is certainly more sound in the case of natural resource industries than in other cases because of the conservation aspect.

Selling below Cost Provisions.—A large proportion of the industrial codes contain provisions which prohibit selling below cost. There is a wide difference between codes in the manner of determining the cost to be used to arrive at the minimum permissible price. In some codes the individual producer is forbidden to sell below his own individual cost. Of this sort is the provision in the code for the shipbuilding and ship-repairing industry.

The following practices are hereby declared to be unfair methods of competition.

(a) To sell any product(s) or service(s) below the reasonable cost of such product(s) or service(s).

For this purpose, cost is defined as the cost of direct labor plus the cost of materials plus an adequate amount of overhead including an amount for the use of any plant facilities employed as determined by cost accounting methods recognized in the industry and approved by the Committee constituted for the enforcement of this Code as provided in Section 8 (a).

In other cases, average costs for the industry or for special subgroups or localities are employed as defining the permissible minimum price. The effect of basing price schedules on average cost is clearly to penalize the low-cost producers, who are thereby prevented from using their cost advantage to secure added volume. To meet this defect, the average of the costs of some fraction of the industry having the lowest costs is used. In other cases the cost of the lowest cost producer, as announced by the code authority after investigation, constitutes the lowest permissible price. The same base price is arrived at in many codes forbidding sales below individual cost by permitting

any producer to meet any price legitimately established by a competitor.

In the actual operation of many cost control provisions there has been clearly apparent an attempt to establish costs at arbitrary levels which safeguard profits. One favorite way of doing this has been to provide for the charging of overhead burden on the basis of a percentage of capacity considerably above that actually operated. Another device is to compel the charging of materials at current replacement values, regardless of actual cost.

Price-control systems based on the prohibition of selling below cost invariably require the adoption of uniform cost accounting methods throughout an industry. This is highly beneficial because much of the most destructive price cutting demonstrably comes from concerns which do not know their costs accurately. Yet such provisions are extremely difficult to enforce. There is room for wide difference of opinion among accountants, even with a standardized system, as to how certain items should be charged. This is particularly true of burden allocation. There are times, too, when it may be advisable for a firm or an industry to sell its products for a time below cost in order to meet competition from other industries.

Loopholes must be provided in selling below cost provisions to allow for the disposal of seconds, of obsolete or damaged merchandise, or of excessive inventories. These loopholes afford excellent opportunities for sellers who desire to evade the cost provisions of codes. In many codes attempts have been made to plug these loopholes. The permissible amount of goods to be sold as seconds has in some cases been limited to a definite ratio to production. Sales of obsolete merchandise or distress sales of excess inventories must in some cases be reported to or approved by the code authority. The more rigorous the restrictions, however, the greater is the burden of expense and inconvenience which must be absorbed by the members of the industry.

Open-price Agreements.—One of the practices specifically frowned upon in court decisions under the anti-trust law was that of agreement among competitors to exchange information as to prices to be charged in the future. The exchange of price information on sales already consummated has always been regarded as perfectly legal. A large number of codes have provided for open-price systems of the type hitherto forbidden

under the anti-trust laws. The open-price provisions of the various codes differ somewhat but the method specified in the iron and steel code is typical. The vital portion of Schedule E, Section 2 of this code reads as follows:

Each member of the Code shall at all time maintain on file with the Secretary a list showing the base prices of all its products and shall not make any change in such base prices except as provided in this Schedule E. Each such list shall state the date upon which it shall become effective, which date shall be not less than ten days after the date of filing such list with the Secretary. . . . None of the base prices shown in any list filed by any member of the Code as herein provided shall be changed except by the filing by such member with the Secretary of a new list of its base prices, which shall become effective on the effective date therein specified which shall be not less than ten days after the date on which such new price list shall have been so filed.

The principal argument for the allowance of open-price agreements is that price competition is thereby brought out into the open. No one with practical experience in industrial marketing will question that many price structures have been depressed to uneconomic levels because of blind fear of what competitors might be doing or be about to do. In most important lines a manufacturer, to hold his customers, must meet the going market price. The going price is under most conditions the lowest price set by a seller of goods of equivalent quality who has any appreciable quantity available for sale. If prices are not public, sharp practice by purchasers, or simply nervousness of sellers, may create a belief in one concern that lower prices are necessary to meet the market. Others follow, but, being in the dark as to what is actually the lowest quoted price, may overdo the reduction, setting a new low level. This may in turn be broken by the same process. It is unquestionably true that where open-price agreements with a time lag between date of filing and effective date have existed, price cutting caused by ignorance has been eliminated.

In theory, then, open-price agreements should help the law of supply and demand to function normally. The chief criticisms are concerned with the administration of the plan. In practice, prices filed are usually not available to buyers. They are available to competitors in the industry. Consequently the way is open during the period between filing date and effective date for pressure to be brought on a concern which seeks to reduce its

prices. This is particularly true where codes contain selling below cost provisions. An instance of the tactics which have sometimes been employed is revealed in the following letter,¹ written by the secretary of a code authority to a concern which had filed a new and lower price schedule.

Your filed prices were roughly 10 per cent less than those filed by your competitors. In view of their experience in the manufacturing of a similar grade, they feel it doubtful that you could justify such prices. Consequently, I feel sure that you will want to revise your prices so that they will bear a closer relation to those of your competitors. They pointed out that in the event you found yourselves unable to cooperate, it was the opinion of some of the members that they might have to resort to procedure provided . . . by the code. Under this provision, a member may complain to the Code Authority in regard to your price schedule. This will lead to an investigation to ascertain whether this price can be justified. . . . Such procedure is of course unpleasant and costly. I am sure this matter can be straightened out without resorting to any such action.

It was pointed out that in the event the investigation proved that this price could be justified on the basis of your own cost, that the members would then be forced to meet your price. This would then destroy your existing competitive advantage and merely serve to lower the existing price structure to no avail.

As a result of this and other types of abuse of open price plans, the National Recovery Administration on Jan. 27, 1934, suspended approval of waiting periods in codes with such price provisions.

Open-price agreements have also been seriously criticized because of their demonstrated tendency to produce uniformity of prices among competitors. Chief critics have been public purchasing officials operating on the basis of competitive bids. It is easy to understand the difficulty of administering statutes providing for the award of contracts to "the lowest responsible bidder" when all bids are identical. Particularly in industrial markets, however, there are many lines in which uniformity of price is the natural and normal order of things. Once this is recognized, it promises to have considerable importance in altering the statutory requirements governing purchasing by public authorities.

¹ Quoted by Mr. A. D. Whiteside, then Division Administrator, at the conference of Code Authorities, March 5, 1934.

Limitation of Production.—Some codes, most notable among them the Cotton Textile Code, seek to control the price structure by regulating the quantity of goods produced. The Cotton

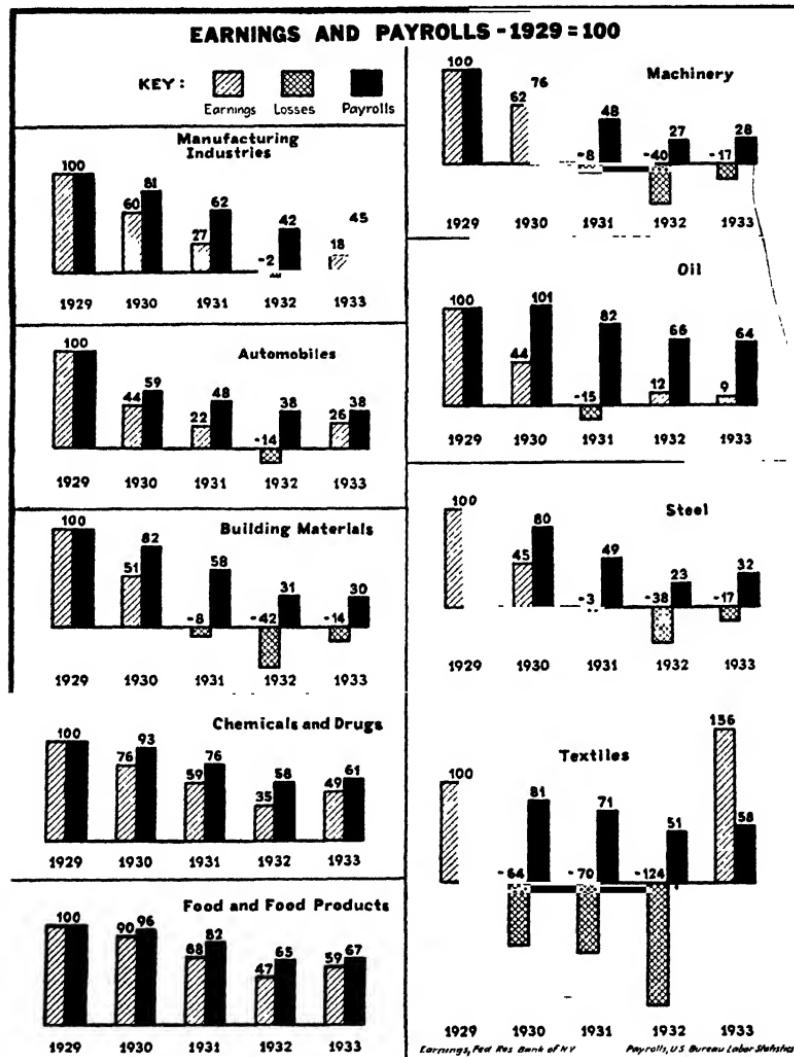


FIG. 46.—A study of earnings and pay rolls in various manufacturing industries, 1929-1933. (From *Business Week*, August 4, 1934.)

Textile Code definitely limits machine operation to 80 hours per week. In addition, it requires that a concern desiring to install new productive equipment (not replacements) must obtain the

approval of the administrator of the code. This resulted in a certain redistribution of business within the industry, but permitted a substantial advance in prices to be effected. The net result of the policy is apparent in Fig. 46, which shows the tremendous comeback in textile earnings in 1933. In the summer of 1934, with inventories growing, a further temporary restriction of production was ordered.

Limitation of production has been carried further in the petroleum and lumber codes. These provide for determination by the code authorities of the total amount to be produced. Each district or trade subdivision is then assigned a quota, determined according to a specified formula. This quota is in turn allocated to the individual producers. The usual basis for this allocation is relative past production. The effect of such plans is of course to freeze the current situation, to restrain the growth of aggressive concerns, and to prolong the existence of inefficient producers. Such drastic control of production may be justified at times when entire industries find themselves in dire distress. As a permanent proposition, the idea is repugnant to every tradition of American business. It is the negation of a free market.

Differentials.—Attempts have been made under several codes to stabilize market conditions by agreement as to the discounts to be allowed to various factors in trade. Many classes of industrial goods, particularly supply and minor equipment items, are distributed through several different classes of jobbers or other middlemen. Price competition between these various distributing agencies has frequently disturbed price structures. The Code for the Wholesaling or Distributing Trade carries a provision which permits agreements by the parties concerned which set up definite price differentials between classes of distributors.

Art. VIII, Sec. 1. In any division in which manufacturers, importers, mills, or other primary sellers sell coincidentally to several classes of buyers the Divisional Code Authority, subject to the approval and with the advice of the Administrator, may arrange for a conference of all interested parties, including primary sellers or the Code Authority governing them, for the purpose of defining and establishing price differentials which shall be fair and reasonable in relation to the nature and extent of the distributing services and functions rendered by each buying class. Such differentials shall include all elements affecting the net price, such as discounts, terms, and allowances.

The Divisional Code Authority, with the advice and consent of the Administrator, and after all interested parties shall have been given an opportunity to be heard on the matter, shall formally announce the price differentials which are deemed fair on specific products. When the Divisional Code Authority announces that a fair wholesale price differential has been established on any product by sources competent to adequately serve the wholesalers in the Division, then and thereafter, or until the Divisional Code Authority announces that such fair price differentials have been discontinued, it shall be an unfair trade practice for a wholesaler or distributor to handle such product unless the price at which it is sold to him allows or provides for such fair price differential.

Other Trade Practice Provisions.—One of the most beneficial results of the codes has been the ability to give force to agreements to eliminate certain unfair trade practices. Prior to the National Recovery Administration various industries had drawn up Codes of Ethics and Trade Practice Agreements under the sanction of the Federal Trade Commission. Unfortunately the latter body was in most cases unwilling or unable to enforce many of the agreements. Firms with higher standards endeavored to comply but were victimized by unscrupulous competitors who ignored the rules. It seems safe to assume that many of the trade practice provisions of the codes will be perpetuated, whatever may be the future of the National Recovery Administration itself. These provisions cover a wide range. Most common are prohibitions of secret rebates, refunds, and commercial bribery. A few of the other practices outlawed in many codes include:

- Misleading or inaccurate advertising.
- Misbranding or inaccurate labeling.
- False references to competitors.
- Interference with others' contracts.
- Price guarantees.
- Consignment sales.
- Special services or privileges to preferred customers.
- Design piracy.

Many industries have laid down in their codes standard procedures to be used in selling. Some provide that all bids submitted must be itemized, forbidding lump-sum bids. The Code for the Commercial Refrigerator Industry prescribes that any allowance given for old equipment shall be specified in the sales contract, establishes special rules for resale of units, parts, and accessories, and specific rules for handling payments under

installment contracts. The Valve and Fittings Code prohibits extension of credit to other than "reasonably well established" buyers. A considerable number of codes provide for the establishment of definite grades and standards and prohibit the sale of nonstandard goods. The Construction Machinery Distributing

462 CODES AT A GLANCE

Restrictions and rules that industries imposed upon members in N.R.A. Codes shown by number and percentage of total

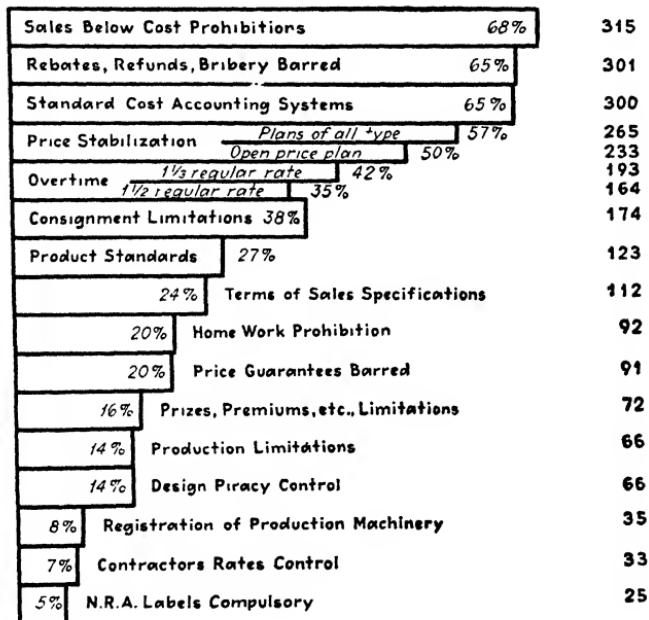


FIG. 47.—An analysis of the major provisions found in the first 462 N.R.A. codes to be approved. (From *Business Week*, Aug. 4, 1934.)

Trade Code prohibits trial shipments and trade-ins of used equipment. Illustrations of similar provisions affecting marketing practice might be continued almost indefinitely. It is obvious that such rules as these are likely to require reframing of many sales policies. In particular, they often raise for sales managers the problem of making sure that salesmen do not violate code provisions in securing orders.

Permanent Effects of the National Recovery Administration?—The National Industrial Recovery Act was originally passed for a period of two years. In its first year, it has unquestionably done a certain amount of good, particularly in enabling business men to get together to outlaw destructive trade practices. It has stimulated the setting up of organizations to collect vital industrial statistics. It has given cost accounting a tremendous push forward. In doing these things it has unquestionably made for more intelligent competition.

On the other hand, many of the National Recovery Administration codes have attempted to cover too much ground. Some provisions are impractical or unworkable. These are natural mistakes of an experimental program. Unfortunately, however, they have made the problem of enforcement a difficult one, and the failure of enforcement has encouraged a certain amount of lack of compliance. More serious, the various attempts to control price structures of individual industries have brought about changes in competitive standing as between one industry and another, or between one manufacturer and another in the same industry. Some concerns have very definitely been hurt by some of the marketing provisions of their codes. Selfish interest has not been absent from industry code committees or from code authorities.

In spite of these drawbacks, it seems clear that American industry will not go back to the days of unregulated competition. For years prior to the National Recovery Administration business men had been seeking through trade associations and otherwise to establish definite standards of business practice. The codes and their authorities now constitute a mechanism for legislating and enforcing such standards. The uneconomic and unworkable provisions of the codes will undoubtedly fall of their own weight. Attempts to maintain arbitrary price levels to protect unwise past investments and to preserve concerns with obsolete equipment and methods or dominated by obsolete minds may pull down with them the groups which persist in them. With the passage of emergency conditions there will probably be a reaction from the policy of preserving the status quo. A general policy of limitation of production or regimentation of trade methods can at best lead only to a static, at worst to a declining, standard of living. Full development of industrial markets

depends upon the production and consumption of an ever-increasing volume of goods.

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